PACIFIC FISHERMAN

TWO GIANTS

Put To Sea . . . . . p 6

FISH CUTTINGS

"Better Than Average". . . . p 33

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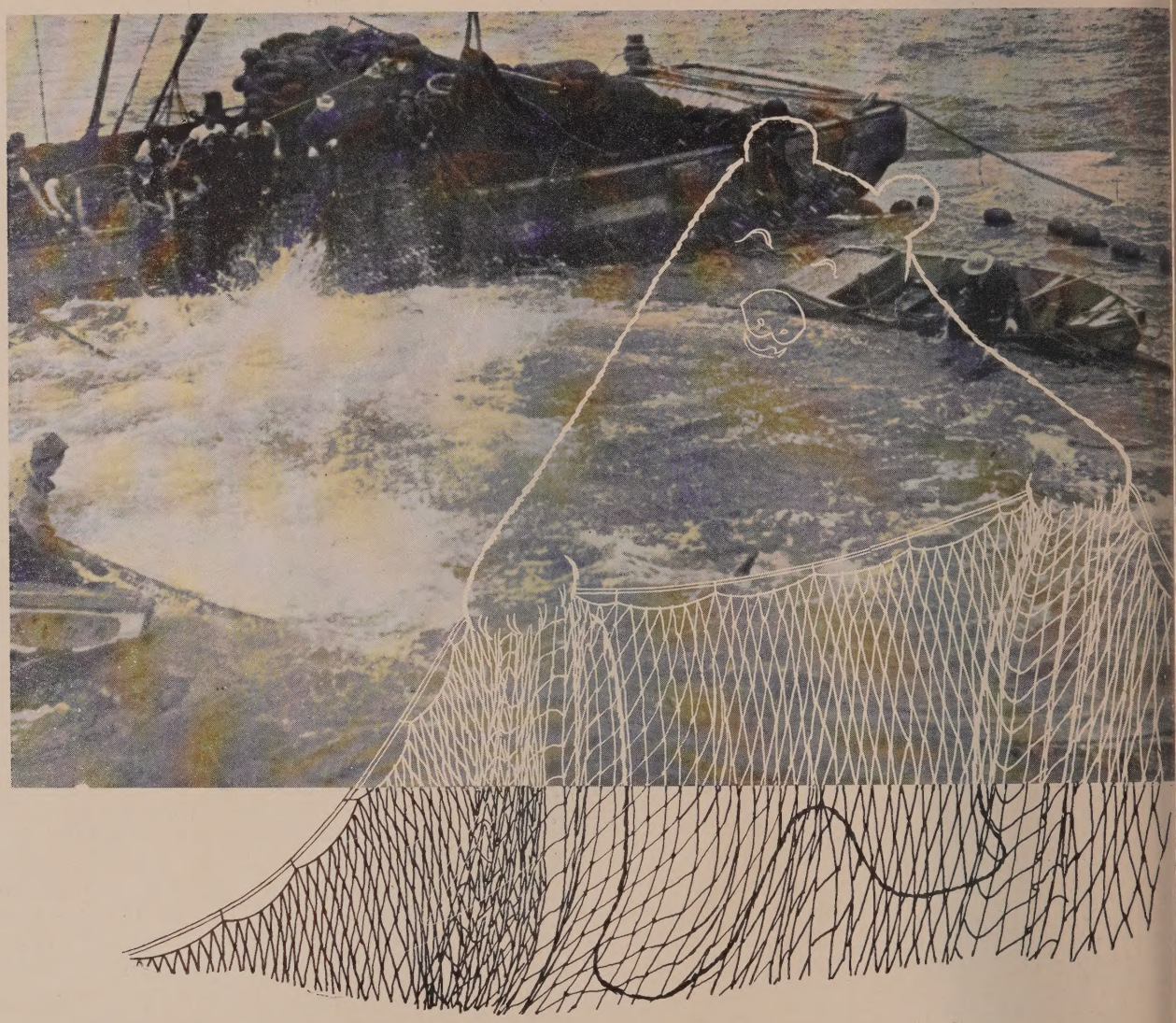
"Determined" Sets Her Nylon

Capt. John J. Cvytanich drives his high-line converted seiner into a boiling set off Central America in this Dick McNeely photo.



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Columbia St. ..... MA 2-1626

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CIFIC FISHERMAN (with which is combined -American Fisherman). Published monthly ex- t January when publication is semi-monthly, by ler Freeman Publications, at 731 S.W. Oak St., tland 5, Ore. Entered as second class matter the postoffice at Portland, Ore., under Act of rch 3, 1879.

BSCRIPTION RATES: U. S., Canada, & Latin erica, one year—$3, two years—$5, three rs—$7. Other countries: one year—$4. Single y 50c, except Yearbook Number, $1.

ANGE OF ADDRESS—Send subscription orders l change of address to Subscription Depart- nt, PACIFIC FISHERMAN, 500 Howard St., Francisco 5, Calif. Include both old and new dresses and zone number.

VERTISING: Complete plates only should be t to PACIFIC FISHERMAN, 235 N.W. Park ., Portland 9, Ore. . . . Advertising copy and , instructions and insertion orders should be t to the San Francisco office.

STMASTER—Send Notice, 3579 to 500 Howard San Francisco 5, Calif.

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Our Fifty-Ninth Year— APRIL, 1961 Vol. 59 No. 5

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Pautzke Appointment Seen As U. S. Pledge to Alaska

● National interest in the fishery and wildlife resources of Alaska was confirmed late in March with the appointment of Clarence F. Pautzke to the position of Commissioner of the United States Fish and Wildlife Service.

No action of the White House could more plainly demonstrate the Federal government's intent to recognize its obligation to Alaska to continue its support of and participation in the rehabilitation of the fisheries which, through the territorial period of Alaska's history, were the responsibility of the U. S. Department of the Interior.

Now, to head its Fish and Wildlife Service, the Department of the Interior reaches out to Alaska and appoints the man who for a year has been assistant director of its Department of Fish and Game.

Far better than any other of the several competent individuals who were considered for the FAWS commissionership, Mr. Pautzke will bring to the office first-hand knowledge of the problems of Alaska's fisheries, of the state's needs in coping with those problems, and—most significant of all—an understanding of the value of Alaska's resources to the economy and future not only of the state but of the United States as a whole.

● Again, Mr. Pautzke stands high above all others who were under consideration in the balance of his experience and background between commercial fisheries on the one hand and sport fisheries and wildlife on the other. The Federal service has these two basic departments—and he is well qualified to have both under his supervision.

To his duties he brings approximately 25 years of background as chief fisheries biologist of the Washington Department of Game, where he became nationally known for his work in up-building Steelhead runs and improving sport fishing by the eradication of coarse fish competitors and predators from sport fishing waters which they had ruined.

To this experience with game fish and as a naturalist he added four years of service as assistant director of the Washington Department of Fisheries; and then his service in Alaska.

Last summer, during the extraordinary run of Red salmon to Bristol Bay, Mr. Pautzke was continuously in the field working with the ADF management team whose handling of the run won, and deserved, the highest praise. It was characteristic of the man that he was in fact only a member of the team, and saw to it that the prime credit went to those with whom he worked.

● Mr. Pautzke can be counted upon to meet fully all the requirements of his high office, representing well the United States in matters pertaining to its fisheries and wildlife resources, whether they be in the direct authority of the states, in the national field, or in the international regions of sea and air.

In selecting Clarence Pautzke, an Alaskan, for this responsibility, the national government would appear to be assuring Alaska that the United States recognizes its responsibilities to Alaskan fish and wildlife resources and will continue to support efforts at their rehabilitation, through the State itself, as well as on the high seas.

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American Telephone & Telegraph Company
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Please send me marine charts showing cable positions in the

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PACIFIC FISHERMAN

April, 1961

Is the Yellowfin Going or Coming?

Possibility of over-fishing makes Tuna Commission take a look at what to do—just in case

● Amazing first quarter of 1961 is astonishing even those who knew it would be exceptional—and forecasts even more extraordinary things to follow in the three quarters remaining.

The most notable manifestation is the record-smashing catch of Yellowfin being brought in, mostly by the big seiners. This year up to mid-March, the total Yellowfin catch was 26,909 tons (excluding transshipments). This tonnage is just about twice the 1959 tonnage to even date, more than twice 1958 or 1957, and 42% more than 1960's. (U.S. B.C.F. data.)

In contrast, the catch of lower-priced Skipjack in the January-to-mid-March period dropped in 1961 to 18% of the corresponding Skipjack catch for 1960 and even a smaller percentage of the period catch of 1959 and 58.

The fishermen were doing fine, in terms of total catch as well as on Yellowfin. However, a small, faint cloud was to be seen on the bright horizon, and everybody in the industry was watching it very closely, to see whether it would blow away or develop into a squall that would drive the vessels away from the fishing grounds.

The Point of Diminishing Returns?

● The observer who pointed out the cloud was the world's best-qualified expert on the Eastern Pacific tuna fishery—Dr. Milner B. Schaefer, director of research, Inter-American Tropical Tuna Commission. At the Commission's annual meeting in Panama in February Dr. Schaefer, in very guarded terms and saying nothing definite, suggested that while there were various other alternatives, "the possibility of overfishing is . . . sufficiently great that serious consideration should be given to the most effective conservation recommendations *should it become desirable to make them during the year.*" (Emphasis supplied.)

Dr. Schaefer did not say that conservations measures were necessary now, nor that the Commission intended to recommend them now, or for certain at any time. He merely pointed out that the Commission's records of the fishery, and the mathematical calculations based thereon indicated it might be necessary to consider seriously what to do in case it looked necessary to do anything—if and when.

Every qualified spokesman queried by *Pacific Fisherman,* in all segments of the industry, was inclined to go along with Dr. Schaefer—in other words, to watch the situation carefully and do nothing until it was proved necessary.

Possibilities Unlimited

● There were many possibilities in the situation. Among those brought up by various people were:

The point of "maximum sustainable yield" has not yet been reached, according to Dr. Schaefer himself. It is being approached, and nothing can be decided until it is reached, and until scientific observations are made as to what happens then.

The mathematical formulas on which the "maximum sustainable yield" point was established are based on bait-boat statistics. The sudden, and almost complete, switch to seining may have knocked these calculations out of shape, and the results may not be what the formulas indicate.

Tuna fishermen are not fishing areas that formerly were fished extensively. Most of the catch this year has been made in the northern part of the range, and the southern reaches have not been heavily fished, at least not by the California-based fleet.

There is no indication so far that any shortage of Yellowfin is developing. Trips are still short, averaging somewhere around 29 or 30 days.

Some of the biggest newly-converted boats will be fishing off Africa, which would slow down the increase of fishing activity in the Eastern Pacific.

Fishermen seem to be catching bigger individual Yellowfin than ever before. It may be possible that the new deep nets may be bringing up deep-swimming granddads that have never been taken into the calculation before. Fishermen report that many of the fish they actually catch are bigger than those they see on the surface.

Everybody seemed calm, and disinclined to panic. One spokesman remarked that there were many possibilities, but that one sure thing is that tuna fishing is very good, and the fishermen are doing fine for the time being.

New Dimensions in Tuna

● The two big new conversions *Western Ace* and *Western King* both went on their maiden seiner trips last month, both heading for the Atlantic. The huge vessels, with capacities of 600 tons or more, marked a new era in tuna fishing, and the trend was more strongly emphasized by two even bigger conversions under way in San Diego.

Then, Eddie Madruga, one of the most successful bait-boat skippers in the business, has purchased a former Navy mine-layer more than 180′ in length, and is converting it into a 1,000-ton tuna seiner. This is a tremendous job, and involves an investment of more than half a million dollars—probably considerably more. Early in March the job had gone no further than removing from the hull almost all of the equipment, including the main propulsion engine, which is

a steam unit, and can be purchased very reasonably. Mr. Madruga is going along carefully, watching every step, with definite but flexible ideas on how the boat will wind up as a seiner. For certain, however, she will mark a milestone in tuna seining. Now that the revolution from bait-fishing to seining is virtually complete, the evolution to bigger seiners seems definitely under way.

Also in San Diego, Sverre Jangaard, who has been identified with many innovations in fishing, and is generally hailed as a successful and enterprising fisherman, is converting a steel former Army cargo vessel into a tuna seiner, with a capacity of between 800 and 1,000 tons. It is too early at this point to go into detail about what Mr. Jangaard plans to do with his boat, but he has in mind a totally new method of pursing and bringing his net aboard, involving two power blocks and making use of the forward part of the vessel to a greater extent than is conventional now.

● What would have been a near-record trip, but was spoiled by a storm, was made by the *Sea Pride*, a "regular" seiner, the first in the fleet to be equipped with a Simrad fish-fish-finder. The *Sea Pride*, using her Simrad, left port on March 9 and began catching fish March 13, according to reports to Benrad Inc., Simr distributors in Southern Californi She was fully loaded by March 1 and was ready to come home, at whi point a storm blew up and she had put into Mazatlan. A Benrad observe Tony Bucci, was aboard the boat a returned to Los Angeles by air March 19.

Ecuador, one of the big conversion made a 25-day trip, leaving Februa 25 and returning March 18. Conside ing her capacity, this was a short a profitable trip. As this is written, ma vessels are on their way in, many them with loads that show that t "maximum sustainable yield" of Y lowfin is a pretty high maximum.

USSR and Japan Forecast Alaska Reds in Abundance

● *Red* salmon abundance in the North Pacific in 1961 will be comparable with that of 1960.

Pinks will be at a low level for an odd-numbered year.

Chums are expected to compare in abundance with recent years, and should not be less than in 1957.

Silvers will be comparable with recent years, and not less than in 1956.

Kings are not expected to show material variation from recent seasons.

● These are the agreed-upon conclusions of Soviet and Japanese scientific representatives as submitted to the Asian international fisheries conference being held this spring in Tokyo to draw the 1961 operating program for the western North Pacific.

While these general forecasts were agreed-upon, there were some wide variations of opinion as to details. Both groups were of the opinion, however, that *Red salmon of Alaska origin would be plentiful.*

Soviet scientists contended that in their fishery abundance of Reds would be reduced, due to decrease in the Ozernaya run of west Kamchatka; but that Alaskan-origin Reds, to which the Japanese have access, would be abundant.

● Japanese scientific opinion on the Red salmon prospects of 1961 made these points:

1. Condition of the Red resource is good, and in 1961 should equal 1960.
2. Five-year and six-year fish will be numerous in the catch.
3. There is no data to indicate decrease in the Red salmon resource. (The Soviet scientists attacked this latter point, contending it could be supported only on the basis of Reds of Alaskan origin, a position the Japanese apparently came to accept, the translation saying: "Japan admitted the role of the abundance of American-origin Red salmon."

● Both Asian groups confessed to some perplexity with respect to the outlook for Pinks, due to the apparently adverse situation prevailing with respect to this species on the west coast of Kamchatka.

Catch of Chums in 1957 for both nations combined was about 65,000 metric tons, and this is suggested as the level which might be anticipated in 1961. Average combined Chum catch from 1958 through 1960 was between 80,000 and 90,000 tons.

Soviet researchers ascribe the weakness of Chums to floods and drouths in the west Kamchatka area, but also to the Japanese high seas operations, which they contend damage many fish, and bear heavily upon the immatures of this species.

Japan's opinion was much more o timistic, and that the catch should on the order of 80,000 tons.

Similarly with respect to Silver the Soviet comment was that the r would not be good; while the Ja anese were of the opinion that would be at least moderate.

Kings brought out sharp disagre ment, the USSR contending that "t resource is being destroyed by the Ja anese capture of immature fish on t ocean." The Japanese spokesmen the other hand argued that their hig seas fishing had not at all impair King salmon abundance.

● General discussions in the plena sessions produced a number of inte esting interchanges. The Soviet del gation commented on the steady i crease in volume of catch by Japa in waters south of the present trea zone boundary at 45° North. The su ject of this boundary and of enforc ment of regulations with respect to integrity appeared to be topics which the Japanese were particular sensitive.

Predators came in for the usual g ing-over, but with some difference For example, the Soviet party w disposed to acquit the fur seals "practically harmless," while the Ja anese contended that considera damage could be attributed to them.

At the eighth plenary session ear in March the commission decide that research investigations related predators and the damage they should be intensified.

KENNEDY on CONSERVATION

President accepts Federal responsibility for oceanic research, salmon and sardine rehabilitation, and pollution control.

● "From the beginning of civilization, every nation's basic wealth and progress has stemmed in large measure from its natural resources. . . . Our entire society rests upon—and is dependent upon —our water, our land, our forests and our minerals. How we use these resources influences our health, security, economy, and well-being.

"If we fail to chart a proper course of conservation and development — if we fail to use these blessings prudently—we shall be in trouble within a short time. . . .

"Wise investment in a resource program today will return vast dividends tomorrow, and failures to act now may be opportunities lost forever. . . ."

The man speaking was the President of the United ates, and he was raising the clearest call for conservation natural resources which has come from a president since heodore Roosevelt.

His message on the subject to Congress came at a time hen Pacific members of Senate and House were support- g strongly the efforts of the American Section of the ternational North Pacific Fisheries Commission for an nergency appropriation of $3.3 million to close gaps in ientific knowledge of the salmon in the eastern North acific, and particularly the Gulf of Alaska.

If President Kennedy had been speaking directly to the oint of this program he could not have supported it more rcefully—

"Wise investment in a resource program today will re- rn vast dividends tomorrow, and failures to act now may opportunities lost forever."

Specifically he called for "Federal leadership for re- abilitation of depleted stocks of salmon and sardines in e Pacific," naming "biological research, development of ethods for passing fish over dams, and control of pollu- on" as means by which the Federal responsibility might be scharged.

Moreover, he declared his intention of sending to Congress "a national program for oceanography, setting forth the responsibilities and requirements of all participating government agencies."

Thus the President seemed to underwrite the Magnuson Plan for expanded scientific study of the sea through United States support.

● The President called clearly for immediate ratification of the Columbia River treaty with Canada, with its enormous possibilities for protection of the salmon fisheries as well as the full utilization of the power potential of the great river. Calling the enterprise "a vision that must be fulfilled," he said specifically: "I urge the Senate to approve this treaty at the earliest possible time."

There was no pussyfooting on pollution. President Kennedy readily accepted Federal responsibility for coping with what he called an alarming condition. This he would do through increased financial assistance to local governmental agencies to eliminate pollution of waters, through strengthened enforcement, intensified research of preventive methods, and a new unit in the Public Health Service charged specifically with the developing of measures to prevent and limit water pollution.

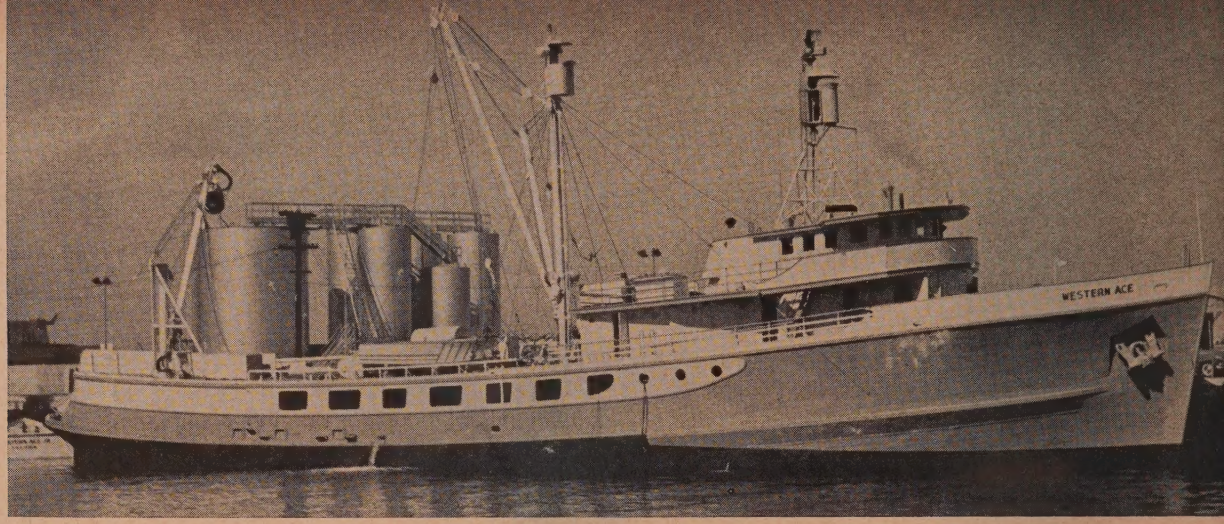
uomela Assumes Attache uties in Tokyo

Arnie J. Suomela, fishery biologist, dministrator and retiring commission- of the U. S. Fish and Wildlife Ser- ce, entered into his new duties as heries attache in the U. S. embassy Tokyo April 3.

En route to the Orient, Mr. Suo- ela spent some time in Seattle, Port- nd, San Francisco, Los Angeles and onolulu, consulting with the fishing dustry at all levels on aspects of his sponsibilities in Japan.

Mr. Suomela takes exceptional ualifications to his new post. Beside s many years of intimate contact ith the industry as a fisherman, ologist, state and federal fisheries dministrator, he has had broader ex- rience on international fisheries mmissions than any other Ameri- n. Thus his assignments have seen m as a commissioner on the North acific, Northwest Atlantic, salmon, na, fur seal, whaling commissions.

Fisheries Technology directors of the U. S. Bureau of Commercial Fisheries laboratories held their annual conference in Seattle in mid-March. Pictured here, standing, from the left: F. Bruce Sanford, Seattle; Harry Seagran, Ann Arbor, Mich.; Joseph W. Slavin, Gloucester, Mass.; Jefferson Collins, Ketchikan, Alaska. Seated: Frank Piskur, College Park, Md.; Maurice E. Stansby, Seattle; Samuel J. Hutchinson, USBCF regional director, Seattle; Harold B. Allen, BCF assistant chief, technology, and James R. Booker, both of Washington, D. C.; Clarence Carlson, Terminal Island, Calif.



Western Ace is the epitome of the gigantic tuna seiner, fishing with the off-set kingpost carrying her pow block, and without turntable. Big as she is, the cylindrical tanks are not part of her equipment.

TWO GIANTS PUT TO SEA

Western Ace and Kin Seeking Tuna School In Tropical Atlanti

● Marking a definite step-up in the size and capacity of tuna seiners, thus opening yet another new era in tuna seining, the two new 600-ton-plus converted vessels *Western Ace and Western King* last month sailed for the Atlantic fishing grounds.

The fact that the Leviathans will fish the Atlantic also has significance. It shows that the California tuna canning firms are pushing more strongly into the world's tuna fishing waters far from their traditional Pacific sources of supply.

Virtually everything about the two new boats is "biggest." *Western King* measures 165′ long by 34′ beam and will carry a "biggest" capacity of nearly 700 tons of fish. *Western Ace,* 167′ by 34′, claims a capacity of around 640 tons. Each vessel has for its main propulsion engine a Fairbanks-Morse 1800-hp. opposed piston 10-cylinder marine diesel engine, with 1.94:1 Westinghouse reduction gear.

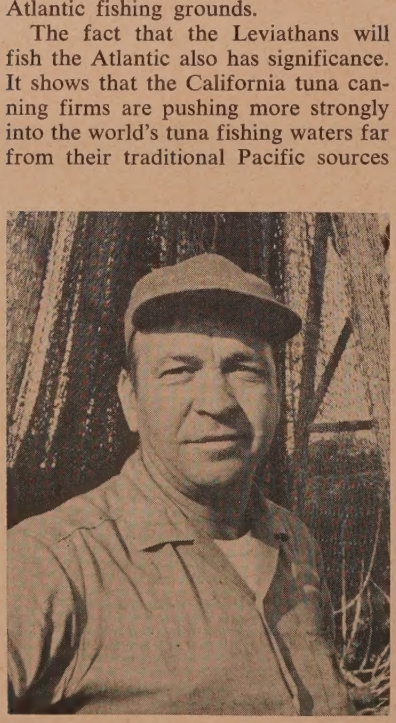
Biggest Nylon Nets Yet

● The nets are certainly the biggest heretofore seen in the tuna fleet. The *King's* net is 565 fathoms long by 52 fathoms deep, made of Momoi Fishing Net Mfg. Co.'s nylon webbing, 4⅜″ mesh, except for 75 meshes of 7½″ next to the lead line and 30 meshes of 4½″ along the cork line. The net will be supported by about 9000 floats, partly Spongex and partly Yellow Buoy make, the Yellow Buoys being 8″ diameter by 6″ long, biggest floats used so far in tuna seining.

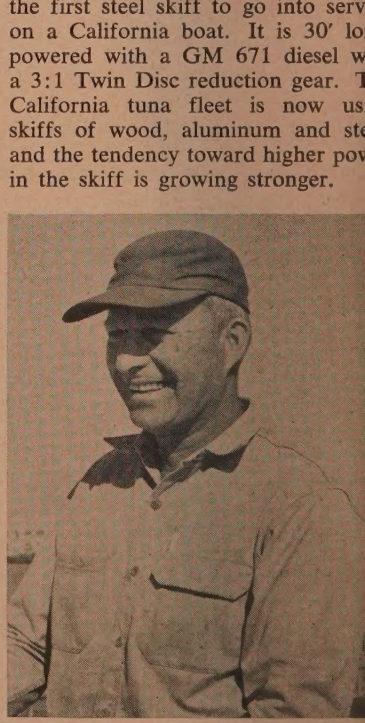
Western Ace's net, also of Momoi make, is 520 fathoms by 50 fathoms, 4¼″ nylon mesh with 7″ strips next to the cork and lead lines. The *Ace's* floats are all 8-by-6 Yellow Buoys.

The net skiffs are the biggest also. *King's* skiff is 32′ by 16′, which makes it the fleet's biggest. It was made by Milo Tomasovich and is powered by a GM 671 diesel engine, with a 3 Twin Disc reduction gear, and is ma of ½″ marine plywood complete covered with glass cloth and plas

Ace's skiff, built by Harbor B Building Co. of Terminal Island, the first steel skiff to go into serv on a California boat. It is 30′ lo powered with a GM 671 diesel w a 3:1 Twin Disc reduction gear. T California tuna fleet is now us skiffs of wood, aluminum and ste and the tendency toward higher pow in the skiff is growing stronger.



Nick Trutanich, master of **Western King.**



Pete Andrich, net boss on the sei **Western Ace.**

t-Handling Methods Vary

The fishing equipment on *Western* ng and *Western Ace* differs widely m one vessel to the other, and the rigs represent the two different ools of thought that prevail at the ment among owners of converted converting vessels.

Western Ace, which was converted Harbor Boat Building Co. of Ter- al Island, was made into a king- t type of seiner, with the power ck mounted on a comparatively rt kingpost placed well aft of the ch, and practically on the star- rd rail. This is a type of rig d by a number of other converted ers, but *Ace's* kingpost, which is nded to hold up a huge net and load of fish, is the stoutest con- uction yet seen in the fleet. It is pped on the main deck, below the ing deck, and is supported by a ut A-frame bolted to the main k.

Ace's Puretic power block is con- led by a full hydraulic system in- led by Marine Construction & De- n Co. of Seattle.

On the *Western King,* which was verted by Harbor Boat & Yacht of San Diego, the power block is unted on a conventional long boom led at the mast just forward of the ch. This also is hydraulically con- lled through a Marine Construction Design Co. system.

The *Western King* shipped the sec- l Rowe net winch to be put in ser- e on large California tuna seiners,

Modern Kingpost rigging of the power block aboard the gigantic **Western Ace.** Note that the post is stepped virtually at the rail, and that there is no turntable. Openings in the stern close water-tight to provide great flotation in the void space below the net poop deck. Panel just aboard the name is a sloping ramp on which the skiff rides at sea, its runners firm in the grooves shown. The seine skiff, first steel one in the tuna fleet, carries a GM diesel engine.

estern King abides by the traditional in tuna seining, with her power block at the boom point and the con- ntional turntable. Note how the table is mounted on the poop deck whose void provides flotation in the erest of seaworthiness.

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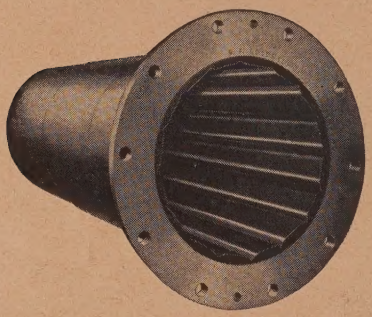

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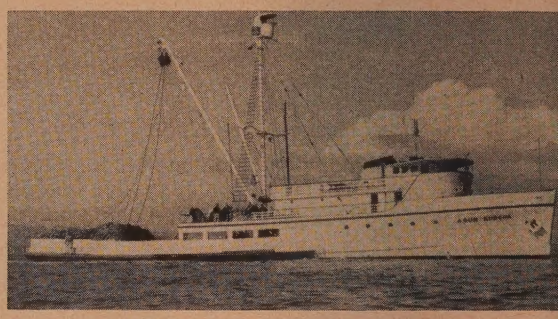

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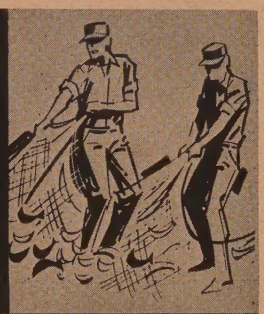

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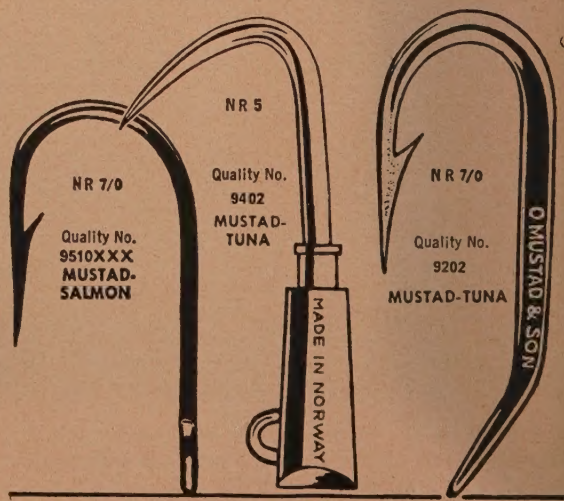


tern King's staff chiefs, Mate e Hoinsky, left, and Chief Engi- High Maxwell.

the original installation on the ly-converted *American Beauty*. e by Rowe Machine Works of Se- *King's* winch is of heavy con- tion throughout, driven by a GM diesel engine through a Twin torque converter, with hydraulic rols. It contains the usual three ns, all in the single deck unit. The e GM 671 that drives the net h also powers a 35-hp. hydraulic p for the vang winches that con- the port-starboard movement of

raulic drives and controls of ch and power block call for plexus of hydraulic valves and nections. Hoses and fittings are le by Aeroquip and are rated at a high for tuna boats—3,000 psi.

the booms. These are mounted on the upper deck, as is conventional on converted seiners.

Western Ace has a special winch built by Wilson Manufacturing Co., a Texas firm that specializes in oil-well equipment. The winch has three drums. It will wind ¾" steel cable for the net, using more than 500 fathoms; 300 fathoms of ⅝" cable for the purse line, and 300 fathoms of ¾" for the tow line. The winch is built to hold 1200 fathoms of ¾" cable, and is a stout piece of steelwork throughout.

Ace's winch is powered by two 50-hp. hydraulic motors, which can be operated either in series or parallel. Hydraulic pumps are Vickers make, and pressures go up to 3000 psi through heavy-duty Aeroquip hydraulic hoses, the first of this weight to be installed on a purse seiner. The winch operates at four speeds, and is controlled from a console placed near it on the working deck. Both the net winch and the power block are hydraulically controlled through a Marine Construction & Design Co. system.

Power Produces Speed

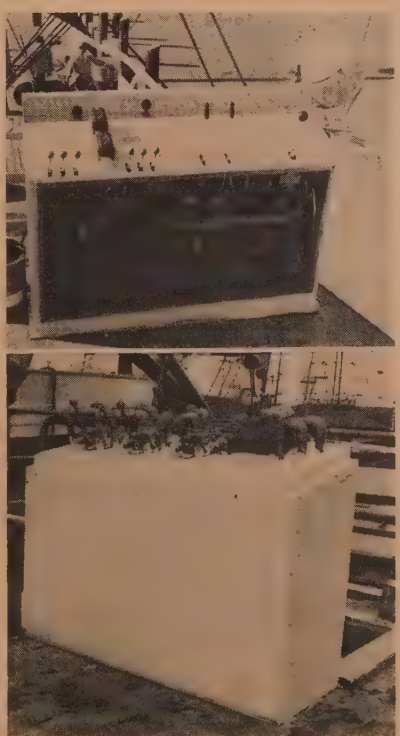
● Both vessels are powered for comparatively fast running. *King* is said to be able to make 13 knots, and the *Ace* has a special inclined ramp on the stern on which the skiff will ride, giving the vessel another half-knot or so speed, according to managing owner Hervey Petrich.

Western King has two 23-hp. Superior auxiliary engines. Her refrigeration equipment consists of three 7½-by-7½ York compressors, with a 3-by-3 Worthington for the galley. The *Ace* has two 100-kw and one 60-kw GM generating sets. In her refrigeration system is a GM 671 connected to a 50-ton York ice machine, plus two 64-ton York ice machines besides.

The turntable on *Western King* is —you guessed it—the biggest in the fleet, 28' by 26', tapered to 24' wide at the stern end. This vessel also has the first all-aluminum fish hopper to be used by a California tuna seiner, and has two auxiliary cargo booms to brail with. Her propeller is 87" diameter by 50 pitch.

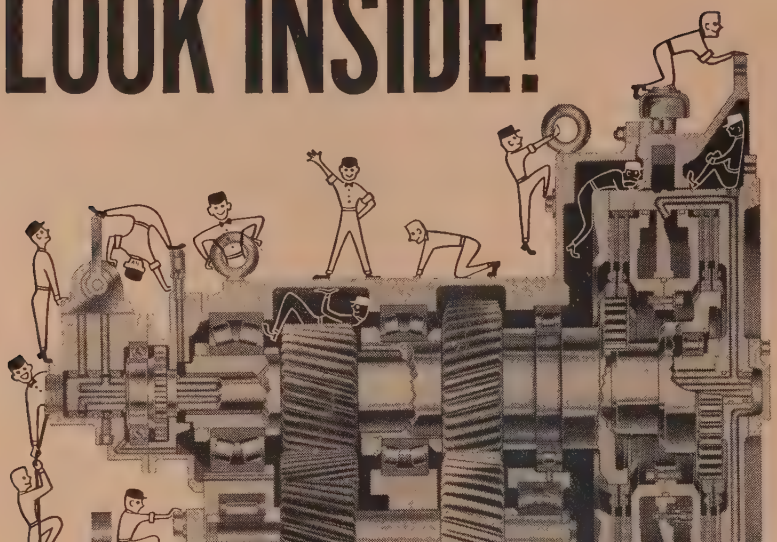
Both vessels — and both, by the way, were rebuilt as tuna clippers by Western Boat Building Co., Tacoma, following their Navy service— are "loaded," as one skipper put it, with navigation aids. Both have Fathometers (two each), Sperry automatic pilots, direction finders, two-way radios, intercoms. *King* has two intercom. systems, plus a third for stand-by, with five stations on the system.

Distinctive winches — The Wilson winch for the **Ace,** top, is all-hydraulic-driven; while the **King's** Rowe winch has its own individual diesel for power.



Winch-Master's Consoles command views of the fishing deck and all key gear. **Ace's** all-hydraulic winch is controlled from the stand in the upper photo. Hydraulic valves also motivate the **King's** gear, as shown in the lower view.

LOOK INSIDE!



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"Injurious Gear" Under Attack

● Japanese fishing gear and its effe upon the fish from the standpoint injury as well as mortality was broug under heavy fire by the Soviet deleg tion at the annual USSR-Japan fis ery conference.

Russian opinion that the gilln should be gradually decreased to t point of elimination as damaging a destructive to the salmon resourc For example, of 16,000 Pinks exa ined by Soviet scientists, 7.2% we found to have been injured by gillne

The Soviets are inclined to blan much of this upon small twine, but t Japanese reject this conclusion as u warranted, while contending that t Russion appraisal of the severity the injury to salmon escaping the gi nets is exaggerated. The subject fin ly was shelved without action.

Japanese longline gear for salm also was attacked by the Soviet de gation as destructive, with many fi found to be carrying hooks in th mouths.

Stronger gangions are the answ to this, the Japanese argued, sayi that their investigations indicat gangions of nylon or Amilan of 0.5 mm. diameter would solve the pro lems, and that the Japanese Fishe Agency is recommending the use gangions of this strength.

Soviet opinion was not placate however, and it was vigorously co tended that the "longline is a vicio method of taking salmon. Use of t gear should be decreased and event ally eliminated."

Commission action with respect longline fishing finally directed an i vestigation of the degree and freque cy of injury to fish escaping this ge and also a study of the weight, leng and maturity of salmon taken by lon line gear.

F.T.C. Opens Hearings In Shrimp Peeler Case

Federal Trade Commission he ings in its case against The Peel Co. of New Orleans, in which the co mission charges violations against group of Pacific Coast shrimp c ners, opened in the Federal co building in Seattle March 21.

At presstime they were continu steadily, and were expected to under way for some time.

In addition to the FTC action, wh seeks a cease-and-desist order, Paci shrimp canners have pending a c suit against the Louisiana compa and its principals.

400 Intent Cannerymen Relish Their Annual Biological Feast

for additional details about FRI, canned salmon, and frozen fish cutting, see pages 33, 34, 37, 38, and 39

When you can get 400 cannerymen — presidents, managers, superintendents, foremen, technical employes —including of course their bankers, suppliers and resource administrators —to turn out; and—

To sit for three hours listening intently to biological fact and theory, boiled down and clarified for cannerymen's comprehension—

Then you have something they really want to hear, something that affects their business vitally.

This is an annual occurrence. It ties-in about the middle of March with the Canned Salmon Cutting. It's the spring report of the Fisheries Research Institute of the University of Washington.

The industry has a special interest in it, beyond its strictly business interest, because the industry dreamed it up some 16 years ago, raised the money to get it going, and still contributes substantially to it.

Here is perhaps the best-attended meeting of North American fisheries people. Moreover, the audience is largely from the operating level. More cannery superintendents get together at the FRI report meeting than at any other time and place.

Why do they come?

Because they are interested in what science knows and thinks about the condition of the resource upon which they depend; about the coming season's run, and the abundance through the following cycle.

Presiding at the meeting was Aubin R. Barthold, president of the Alaska Packers Association, president of the Association of Pacific Fisheries.

SALMON IS THEIR SUBJECT—A group of judges at the 23rd annual Canned Salmon Cutting. By rows, from the left: **TOP**—Harold Thom and Jack Benjamin, New England Fish Co.; Jay Gavin, Gavin Bros., and Lawrence Dressel, Dressel-Collins Fish Co. **MIDDLE**—Eugene C. Scheerer, Scheerer Canning Co., and Ivan L. Fox, San Juan Fishing & Packing Co.; A. J. L'Amie, Columbia River Packers Association; Harold Norberg, Pacific American Fisheries; Ronald Tullis, Alaska Packers Association. **BOTTOM**— Sun W. Yip, New England Fish Co.; Don Freeman, Emard Packing Co., and Emil Storseth, P. E. Harris Co.; Vernon Paulson, Alaska Packers Association, and William Dolphin, Kadiak Fisheries Co.

Harbor Boat Merged into Chance-Vought

Harbor Boat Building Co. of Terminal Island, 40-year-old shipbuilding enterprise, has joined Chance-Vought Corporation of Dallas, Texas, as a subsidiary, following an exchange of stock, it was reported last month.

There will be no changes for the time being in personnel or organization, it was said. John Rados, well known on the Southern California waterfronts, who founded and heads the shipyard, will remain as president.

Chance-Vought, basically an airplane firm, has diversified into a variety of interests, including ship instrumentation and other marine activities. Its affiliation with Harbor Boat Building Co. will add a good facility for development in these fields.

Harbor Boat, on the other hand, will by the merger gain financial strength for expansion. The yard now occupies 300,000 sq. ft. and employs 335, the announcement said.

The merger also takes Harco Engineering Co., design firm allied with Harbor Boat Building Co., into the Chance-Vought organization. There will be no immediate change in Harco or in its relationship with Harbor Boat under the new arrangement, it was said.

Harbor Boat Building Co. has been one of the leading yards in the series of tunaboat conversions.

Star-Kist Caribe Plant Design by Frank Politeo

In the frequent comments and inquiries received with respect to the Star-Kist Caribe, Inc., tuna cannery at Mayaguez, Puerto Rico, featured in *Pacific Fisherman* for November, 1960, the question is often asked as to who was responsible for the architectural and engineering design.

Nicholas F. Trutanic, vice president of Star-Kist Foods, Inc., informs *Pacific Fisherman* that supervisor of architecture and engineering, designer of the plant and producer of the working drawings was Frank Politeo of 1519 Dodson Ave., San Pedro, California.

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PACIFIC Fisherman's NEWS

APRIL 1961

Japan Bars Its Trawlers From Fishing on Halibut Grounds Below Peninsula

Japanese trawl fishing south of the leutians and Alaska Peninsula will ot be permitted this year east of Uni-ak Pass.

The Japan Fishery Society was so nformed by the Japan Fisheries gency about the middle of March. eason given translates into these ords:

"The area where the industry pro-osed to develop trawling operations is year is too close to the United tates coast, and there is probability f a mixed catch including halibut, shing for which (by Japanese) is not ermitted under the tripartite treaty."

Specific waters in which trawl fish-g by Japanese vessels would not be nctioned this year were stated thus: "East of Longitude 165° West, and orth of Latitude 53° 30′ North."

This would exclude the Japanese awlers from Davidson Bank, Sanak ank, and the grounds where they rospected last fall in the vicinity of e Shumagin Islands.

It should be noted that nothing is id regarding fishing in these waters y means of tanglenets.

In September last year Japanese essels were observed prospecting be-veen the Sanak and Shumagin groups ith what appeared to be tanglenets s well as trawls.

● In any case, the decision by the Japan Fishery Agency is accepted as good news by the American and Canadian halibut fishing fleets, where there had been serious misgivings that Asian trawlers might excessively exploit the halibut populations on banks where the resource has been protected for generations under the treaty between the United States and Canada.

Nothing in the Japanese government position can be taken to prevent its trawlers working the banks south of the Aleutians and west of Unimak Pass, and they may be expected to do this, although the relatively limited area may react against its economic attractiveness.

Nor the announcement from Tokyo provide any assurance that Soviet vessels will not this season be south of the Alaska Peninsula in furtherance of their intent plainly acknowledged last fall of entering the North Pacific halibut fishery. Unlike the Japanese, the Soviets are under no restrictions or abstention agreement outside of territorial waters with their limit three miles from an American coast.

● American and Canadian reaction to the Japanese decision, in addition to relief, was one of gratification that Japan had recognized realistically that trawl fishing on the Westward banks inevitably would take substantial quantities of halibut in contravention of the abstention obligation of the North Pacific treaty.

Puget Salmon Licenses Hit All-Time High

● Salmon gear licensed by the State of Washington for the 1961 Sockeye and Pink season is greater in amount than in any previous year, due to the strong up-swing in licensed seiners.

With 563 purse seines licensed to fish in Washington, the potential fishery to which the resource might be subject is staggering to administrators.

Milo Moore, Washington director of fisheries, reported at presstime that, beside the 563 purse seines, 1961 licenses for gillnets number 830 and for reef nets 96. An interesting fact is that only 38 Alaska-resident purse seine boats are included in the 563.

In 1960 the breakdown of gear licensed was: purse seines, 338; gillnets, 812; reef nets, 89.

In the last Pink salmon year—1959—the gear licensed was: purse seines, 425; gillnets, 876; reef nets, 104.

● In the preamble to its tentative recommendations for 1961 regulations, as disclosed to the salmon industry at Bellingham, Wash., December 15, 1960, the International Pacific Salmon Fisheries Commission offered as one of the underlying considerations involved in preparing the regulations was:

"That the size of the U. S. fleet

ish Divoteer's Spring ournament April 21

Ken Williams, Dehn & Co., Seattle, ew president of The Fish Divoteers, as announced that the organization's 3rd annual spring golf tournament ill be held Friday, April 21, at the ainier Golf & Country Club in eattle.

Starting time reservations for the spring tourney will not be accepted by the pro at Rainier until 1 p.m., Monday, April 17.

Seiner "Comet" Lost In Fire Off Mexico

The purse-seiner *Comet,* 100 tons, 80 ft. long, out of San Pedro, Calif., caught fire and sank off Mazatlan, Mexico, in February last. Returning crewmen reported that there was no fish aboard at the time of the accident, and nobody was hurt in the mishap. The *Comet* seems to have been outbound from Mazatlan after refueling, and was not far offshore when she went down. The skipper was Pete Bogdanovich.

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APRIL, 1961 Volume 59 Number 5

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A Miller Freeman Publication

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Publication Office
731 S.W. Oak Street, Portland, Ore.
CApitol 2-1314
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71 Columbia St., Seattle 4, Wash.
MAin 2-1626
Advertising and Production Office
500 Howard St., San Francisco 5, Calif.
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will be the same as during the 1957 *run."*

In its report for 1957 the commission shows that the maximum number of units of U. S. gear delivering fish on any one day in 1957 was: purse seines, 234; gill nets, 638; reef nets, 87.

It should be recognized that the figures for 1957 are gear *actually fished;* and that the data for 1961 given above are for gear *licensed to fish.*

It is generally recognized that there is always a shrinkage in number from the boats licensed and those which eventually actually use the licenses; but competent observers agree that there appears every prospect that there will be 400 American purse seiners fishing from Cape Flattery to Point Roberts in 1956.

In the last Big Year—that of the Adams River run in 1958—the number of units of U. S. gear actually fished did not closely approach the 400-seine mark. In 1958, American gear actually fished was: purse seines, 368; gill nets, 689; reef nets, 82.

● What will be the result of the prospective great increase in gear?

This the commisssion did not spell-out at the Bellingham meeting. However, in the past, in its efforts to discharge its two primary responsibilities, (1) to secure adequate escapement, and (2) to divide the permissible catch equally, the commission generally has been obliged to limit hours of fishing to offset excessive concentrations of fishing effort.

Alaska Fishermen's Union Top Management Re-Elected

All top leaders of the Alaska Fishermen's Union, save for Swam Ohman of Astoria, who did not seek re-nomination, were nominated without opposition in March. Thus George Johansen, secretary-treasurer, enters upon his 11th consecutive year in that office; and Swan Lundmark, disassistant, upon his 10th.

Kenneth Olson of Astoria was nominated for the Columbia River agent's post in place of Swam Ohman. Jack Wood of Bellingham, Harold Gudbranson of Ketchikan and Abe Lehto of San Francisco were all renominated.

Reidar Hammer Leads FCA for 5th Year

Reidar Hammer of Seattle was elected president of the Fishermen's Cooperative Association for the fifth consecutive term at a meeting held February 25.

Oscar Hall was elected vice-president and Bert G. Johnston, secretary-treasurer. Both are residents of Seattle.

Mel Howard of Cathlamet, Wash., and Harry Lund of Des Moines, Wash. are new members elected to the board of trustees at the annual stockholders meeting.

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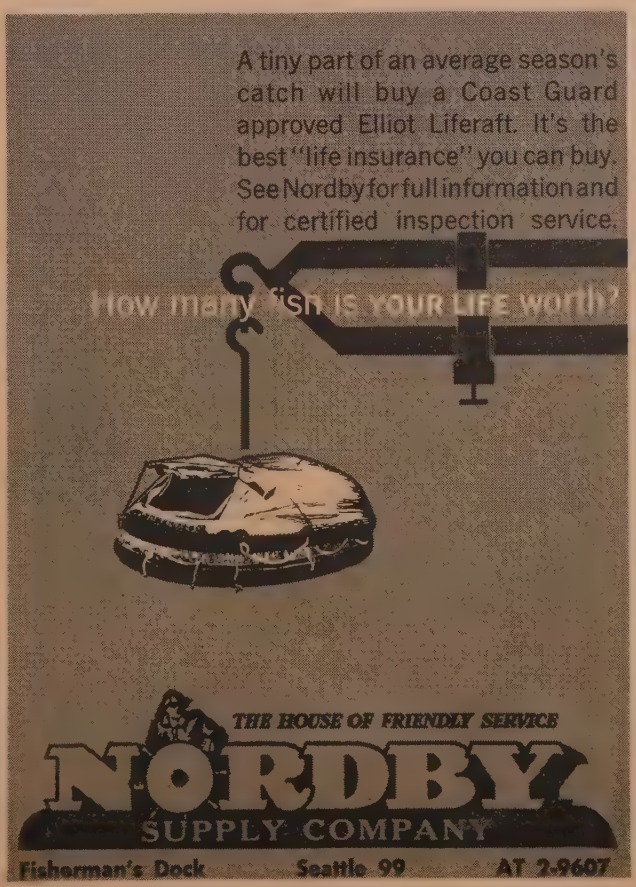
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High, dry bow and the full section where 6,000 Kvichak Reds can ride show plainly in this running photo o a new Bristol Bay Bumble Bee as she swings in a turn after delivering 13.2 knots with her Waukesha diesel

BRISTOL BAY BUMBLE BEES

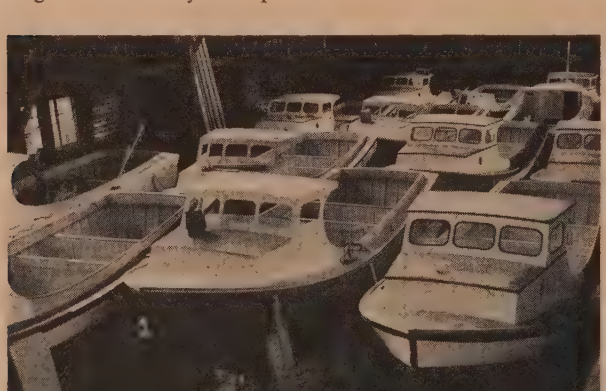
4-B Fleet of 18 Gillnet Vessels is Diesel Driven

● High-bowed and diesel-powered, a neat fleet of gillnetters from the Columbia River Packers Association shipyard at Astoria, Ore., is bound for Bristol Bay this season.

They'll be luggers, for they are a modernization of Adolph Lindstrom's original Bristol Bay stern-picker whose capacity was among the largest ever recorded on The Bay.

Moreover, they'll be dependable and safe, with the kind and number of horses which will get them down to the Ship's Anchorage with the front-runners.

There are 18 of these hulls in the 1961 class—17 fishermen and a scientist. Seven are for the Columbia River Packers Association's own fleet six are for the CWC Packing Co., in which CRPA has a half-interest; four are for individual fishermen; and one is for the Fisheries Research Institute to use in its investigations on Lake



Thirteen out of 18 Bristol Bay gillnetters receive their finishing touches and Waukesha diesels in the Columbia River Packers Association's shipyard at Astoria. Charles E. Nelson, third from right, president of Waukesha Motor Co., came to the Pacific Coast to get the feel of the fisheries. From left: Carl Harris, Waukesha sales representative, who sold the Bumble Bee biz; Ralph Hendrickson, CRPA vice president in charge of Alaska operations; F. C. Schulze, Waukesha sales manager; Aurie Thompson of Piston Service, Seattle, Waukesha distributor; Mr. Nelson; A. G. Mulkey, Waukesha's Pacific Coast manager, Los Angeles; Warner Leonardo superintendent of the CRPA Naknek cannery, for which most of the boats will fish.

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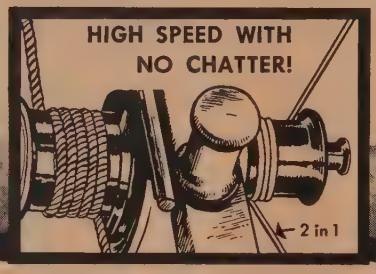

Here's why: 40 to 50% of the surface grips the winch, not just high spots as with twisted rope. Less wraps on winch head.

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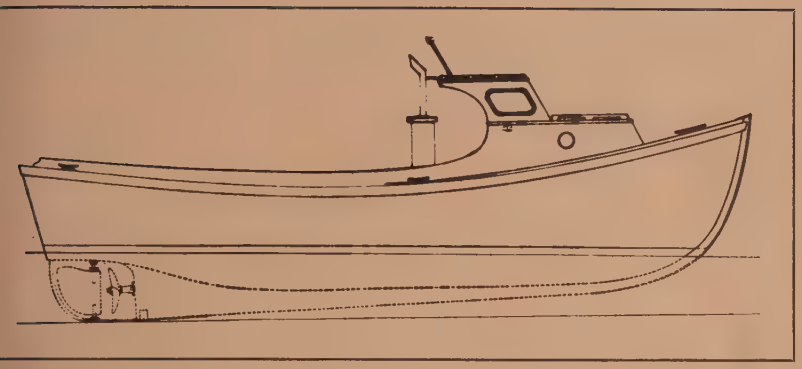


weet, swinging sheer of the new Bumble Bee model is evident in this out-oard profile, which only hints at the capacity to carry 6,000 Red salmon.

iamna.

This last boat has been modified om the gillnetter prototype to sleep ur men, and is fitted with a boom nd power winch/hoist for towing and andling the FRI fry-sampling mid-ater trawls and seines.

The Bumble Bee boats, as they are metimes called on The Bay, are 32' verall length, 10½' in the beam. Mr. ndstrom has altered the sheer of the rlier Bees to give a high bow for rotection and a dry boat. The photo ows how sweetly the line swings wn and aft, masking effectively the llness of the 'midships section where e payload of Reds rides back to e cannery. How many fish? Up to 000, of the 1960 size, anyway.

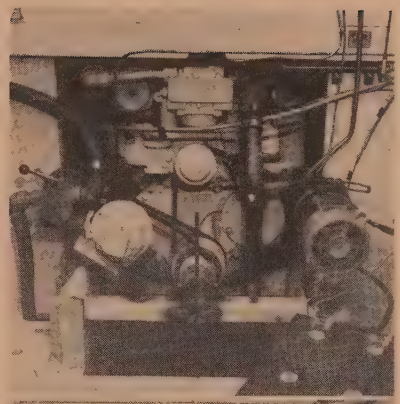
Power? It's the same for all the umble Bees this year, 302 cu. in. aukesha diesels, turbo-charged to -hp. at 2,200 rpm., and turning a blade 24 by 18" wheel at 1,100 m. through a Capitol 2:1 reduction ar.

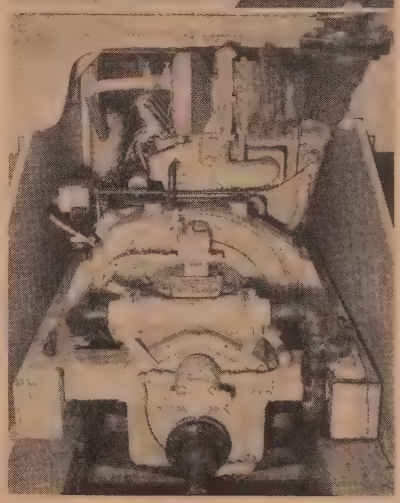
The Bumble Bees buzzed out 13.2 ots on a two-way run over the easured mile at Astoria.

Among the innovations in this ries of gillnetters is the employment an alternator in place of the usual nerator. This item is of Delco-emy manufacture which charges at amps. when the Waukesha is idling d at 66 amps. with the boat run-ng full.

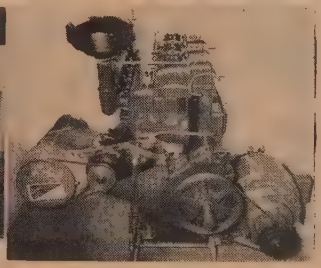
Equipment includes a CRPA-built wer gillnet roller. The Jabsco pump d other auxiliaries are driven rough a V-Belt Drive Co. take-off. ern bearings are Goodrich Cutless bber, virtually a necessity in the ty water of Bristol Bay, and where e boats almost invariably lie on the ud a good part of each day.

A notable feature of the CRPA ats is the 35-watt two-way RCA ra-ophone with which all the craft are uipped. They can report their catch-, ask for instructions, call for help, and generally keep in touch with what Ole is doing wherever they may be on Bristol Bay.





Installed Waukesha diesel in one of the Bumble Bee gillnetters, seen from either end. Top view, taken from the forecastle, shows the compact installation and the Delco-Remy alternator at the lower right. Bottom photo, taken from the fish hold with the engine cover removed indicates accessability with no waste of space.



LUCKY STAR, 60 ft Alaska crab fisherman. Art Rorvick, Captain; King Crab, Inc., owners.

LUCKY STAR "Brings 'Em Back Alive" with an AIR-COOLED Lister

***2,000 CRABS MUST BE KEPT ALIVE** in the galvanized steel tank in LUCKY STAR'S hold for delivery to the cannery.* Water circulation which must not fail, is achieved by a 4 x 5 Weinman non-clogging centrifugal pump, powered by a dependable, economical air-cooled 13-18 HP Model SL3 Lister Diesel. Lucky Star's Lister also drives a 1½ KW generator for battery charging.

Marine Equipment Company, Seattle Distributors, have not only equipped Lucky Star with a dependable Lister but also several other crab boats fishing the Kodiak area. Like many other Alaska crab boats, Lucky Star may be equipped to fish for salmon, with a change of gear.

Because of the exceptional advantages of their air cooling, the engines of the Lister SL Line (1½ to 72 HP) have created an entirely new, gratifying concept of auxiliary power generation. And these economical Listers, sure-starting even in sub-zero temperatures, are also ideal for the propulsion of small and medium sized boats.

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2936 Hyde St.

Mss Martiri has been producing very well for her owners, F. Alioto Fish Co., San Francisco, according to Mario Alioto. Powered with a 165 hp. (continuous) Murphy Diesel, the trawler fishes from Morro Bay to Crescent City. The craft is skippered by Michele "Mike" Sciancalepore.

"PERFORMANCE IS 50% BETTER— FUEL COSTS 30% LOWER— LUBE COSTS 80% LOWER— NO MAINTENANCE TO DATE"

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NORTHERN ENGINE & EQUIPMENT (B. C.) Ltd.
P.O. Box 184

Halibut Strike-Threatening Minimum Price Plan Fizzles

● Halibut fishing in the North Pacific begins on schedule this month as result of the rejection by the American union fishermen of a program which, seeking a guaranteed minimum price up 59% from the 1960 average, would inevitably have produced a strike with heavy losses.

The guaranteed minimum price proposal died late in March when Homer Stevens, secretary of the Pacific Coast Halibut Union and Brotherhood Conference, which sponsored the proposal, declared it had failed to secure the support of two-thirds of the Puget Sound-based halibut fleet.

He reported large favorable percentages in British Columbia and in Alaska. While exact information as to the numbers of Alaska halibut fishermen voting on the proposal is not available, understanding in Southeast Alaska is that those voting actually were only a small proportion of the state's actual halibut fishermen.

The minimum price schedule made a part of the proposal called for a flat minimum price of 27¢ per lb. for halibut of all sizes at Seattle, with no deductions for heads, ice and slime. This would be equivalent to 31.3¢, or 59% above the 1960 average price.

● Failure of the minimum price project to generate support is ascribed by close observers of the industry to several points, of which these are the principal ones:

1. Unwillingness of many of the union members to submit themselves to a strike while vessels of the fishermen's cooperative in northern British Columbia would be operating, even under the restricted program to which the co-op had agreed.

2. Better understanding of market conditions on the part of the American union members. As by far the major part of the North Pacific halibut catch is sold in the United States, the condition of that market is paramount in halibut economy. Puget Sound halibut fishermen, being more closely in touch with the market, and perhaps with better communications and interpretation, foresaw the probability of favorable prices this season.

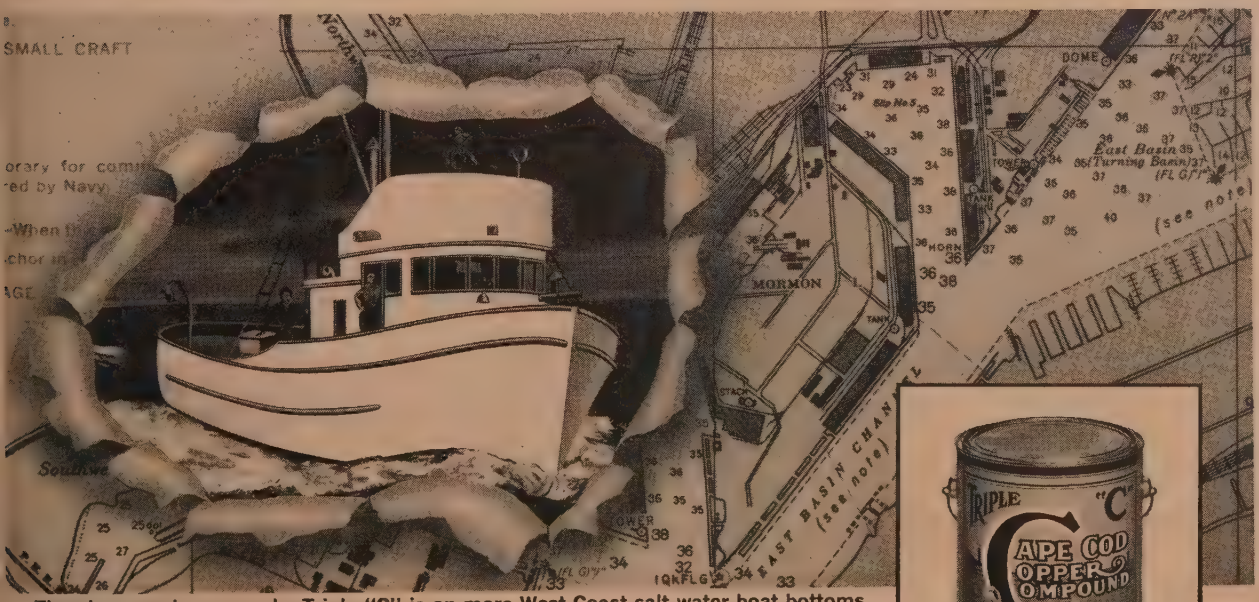
3. Main halibut ports such as Seattle, Vancouver and Prince Rupert, which enjoy a substantial fresh-shipping market, tend to benefit from a free auction based on supply and demand. On the other hand, those ports where virtually all landings are frozen; and the "camps" where buyers are few, tend to find the prospect of a high-minimum guaranteed price attractive.

● First legal halibut fishing of 1961 starts April 10 in Area 3B-north, the waters of Bering Sea. This will be followed April 25 by fishing in 3B-south, being waters west of the Shumagin Islands and south of the Alaska Peninsula and the Aleutian Islands.

American and Canadian vessels alike will be alert to detect the presence of Japanese or Soviet vessels fishing in Area 3B-north, or Japanese trawling south of the Peninsula.

Action of the Japanese government in denying sanction to trawling by its nationals along the shelf east of Unimak Pass was accepted warmly by the

TRIPLE "C"... *best by any chart!*



There's a good reason why Triple "C" is on more West Coast salt water boat bottoms than any other paint. It's because fishermen and other work boat operators know Triple "C"— Cape Cod Copper Compound—provides extra months of trouble-free operation for every dollar invested. Your dealer will tell you that it's the world's finest anti-fouling paint: ask him for Triple "C" today.

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"Our RCA RADAR N3A is
extremely sensitive and
completely reliable"
. . . says Capt. Junius Crochet, Skipper
of the "Zelma," W. A. Richmond fleet

"You just can't beat the RCA N3A Radar as an aid to safe navigation," reports Captain Crochet. "Here's an example of how important it is in our daily operations. On a recent outbound trip to the Gulf, with a load of passengers, through dense fog, our RCA Radar picked up a tiny target. I reduced speed and kept the target under constant observation until we came near. Through a break in the fog I spotted a towboat and three barges—stopped because of the fog! It's a real comfort to have the RCA Radar aboard—an extremely sensitive and completely reliable unit under all conditions."

Small in size, yet rugged enough to withstand the severe beating it takes aboard the "Zelma," the RCA Radar N3A is a natural for fishing vessels and workboats. The three-unit construction puts the transmitter/receiver unit below decks where it belongs, cutting service costs to a minimum. The small, lightweight antenna and radome, just 27 pounds in all, can be installed higher on the mast, thereby increasing range without affecting vessel stability. The RCA Radar N3A features a seven-inch scope, 3 KW peak power and four range scales of ½, 1½, 6 and 18 miles, the latter being particularly useful in detecting high land masses along the shoreline.

The "Zelma" is one of six crewboats operated by the W. A. Richmond Boat Rental Corporation of Morgan City, Louisiana. Two other boats are also equipped with RCA Radar and similar installations are planned for the other three boats. "I see a large and continued future for crewboats equipped with modern electronic gear," said Mr. W. A. Richmond, fleet owner, "that's why I keep my vessels as up-to-date as possible."

Find out how this new compact radar from RCA can help your fleet to navigate better for increased safety and profit. For further particulars, write to RCA Radiomarine, Fleet Marine Equipment, Dept. T-413, Building 15-1, Camden, N.J.

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American and Canadian halibut fleets as realistic recognition of the fact that trawling there inevitably would catch halibut; and that this is abstained by the Japanese under the North Pacific treaty.

Court Awards Damages For Sinking of "Jane"

Damage awards resulting from the sinking of the halibut vessel *Jane* off Cape Flattery Sept. 27, 1959, were awarded in Federal Court, Seattle, in March.

Martha Jorgensen, widow of Per B. Jorgensen, was awarded $65,000. D. E. Hoel, 63, a crewman who was injured but rescued, was awarded $42,500.

P. H. Toft, co-owner of the vessel, was awarded $33,500 for loss of the craft and her catch.

Case brought by Mrs. P. H. Toft Jr., whose husband was skipper of the *Jane*, and who lost his life, was settled for $70,000.

Jane was a 56-footer and was run down in a fog and sunk by the freighter *Mormacpine*.

George Johansen Attends Meeting in Puerto Rico

George Johansen, for 11 years the ranking officer of the Alaska Fishermen's Union, in March represented that organization of salmon and trawl fishermen at the Seafarers' International Union convention in Puerto Rico.

Commercial Trout Trade Again Active in Alaska

Commercial utilization of Dolly Varden trout is continuing in Southeastern Alaska with the issuance of permits to Petersburg fishermen, Walt Kirkness, Director of the Commercial Fisheries Division reports.

State regulations provide for commercial fishing of trout and char when such harvest is compatible with proper sport and commercial fisheries management. Dolly Vardens are presently at a high level of abundance in Southeastern Alaska and the harvest by sportsmen is slight, therefore, commercial fishing for this species is felt to be justified in areas where they are not utilized extensively by sportsmen.

Trout weirs will be permitted in the fresh water streams of Southeastern Alaska under close supervision.

Commercial take at these weirs will be limited to Dolly Varden. All other fish will be released unharmed. The period of operation will be confined to the spring trout migration, roughly April 1 to May 15.

Test Simrad Sonar in Underwater Tuna Studies

To test the practical usefulness of underwater sonar equipment in finding fish, and in studying the behavior of tuna under practical fishing conditions, the Bureau of Commercial Fisheries last month sent two of its scientists on a regular tuna fishing trip aboard the seiner *West Point,* equipped with a Simrad sonar unit loaned by the manufacturer, through Viking Equipment Co., Seattle, distributors.

The *West Point,* commanded by Capt. Carl Hanken, volunteered to mount the sonar and take the scientists aboard, as its contribution to the experiments and tests. The scientists are John Wilson Martin and Richard R. Whitney. Mr. Martin sailed with the Norwegian fishing fleet which some months ago made a similar experimental and testing trip in North African waters. He is a former member of the scientific staff of the Fisheries Research Institute of the University of Washington, and for a number of years was project leader for the FRI in its Southeast Alaska research projects.

The current test, it was explained, has a double purpose: (1) to determine the usefulness of the equipment in actually finding fish; and (2) to test its value in studying the behavior of tuna when approached by different kinds of fishing gear.

The Simrad equipment has a sounding unit installed under water, suspended from the hull, and a recording dial in a housing in the pilot house. By observing and interpreting the indications on the dial, the skipper is able to locate and track schools of fish as far away as a mile. The Simrad is also capable of scanning through a wide arc, and a trained pilot can determine the size, composition and density of a school by observing the indications.

FRI Bullseye Worth $10.5 Million

● Three hundred thousand cases of Red Salmon, worth around $10,500,000, would not have been packed at all in 1960 if the run to Bristol Bay had not been correctly forecast.

Some 5,000,000 Reds would not have been caught if the Fisheries Research Institute had not ferreted-out the facts and insisted they were sound; and that in the face of stubborn disagreement.

These were points made to the Salmon Research Conference at Seattle March 14 by Richard Van Cleve, dean of the University of Washington College of Fisheries.

"In the face of this there should be no question that good research pays; but how can we distinguish between good and bad research, good and bad management?" he went on to ask.

"It must be done by competent people; and we need more of them."

Dr. Van Cleve declared the Magnuson Marine Sciences bill now before Congress is basically sound and would go far toward providing expansion of the United States' studies of fishery biology and oceanography. From the point of view of the fishing industry, however, he felt the measure should be more closely associated with the fisheries both in biology and technology.

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Glass-and-Resin Gillnet Boat is a Real Speedster

● British Columbia fishermen are particularly interested in a 27½" gillnetter recently built at Chappell's Boat Works on Lulu Island because it incorporates at least two unusual features — exceptional speed and a fiberglass hull.

J. Wright Chappel, who designed the boat, named *Beljay*, says that it will make about 45 knots an hour when under full power, but that it will be a good all-round workboat as well as speedster.

Milton Roberts, of Richmond, who fishes for B. C. Packers, expects that he will be able to cover the distance between the Fraser River and Rivers Inlet in less than eight hours at normal cruising speed of 35 knots.

It's doubtful whether there's a faster vessel on the coast for this specific purpose to which *Beljay* is assigned. While primarily intended as a gillnetter, during the off season Mr. Roberts plans to use his boat for log salvaging along the coast. In the latter activity speed is desirable because the faster the vessel the more logs can be salvaged within a given time.

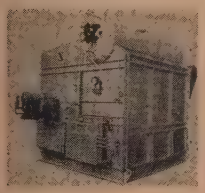
Power for the *Beljay* is provided by a 540-hp. war surplus Ford marine engine with Allison hydraulic gear at 3,000 rpm. by direct drive.

An almost exact replica of the *Beljay* is being built at the Chappell yard for Elmer McKay. It will be equipped with a 275-hp. Chrysler.

There are two watertight bulkheads on the *Beljay*. The bare hull weighs only 2,000 lbs. Superstructure is of plywood and the fiberglass varies in thickness from 1" at stem and chines to ½" at bottom.

The gillnet drum will be installed in *Beljay* before the next salmon season starts. The cockpit for gillnets is 8' square built of fiberglass, and fish hold will have a capacity of 2,180 lbs.

Mr. Chappell believes that the fiberglass construction using a reinforced type with Naugatuck resin is of equal interest to the unusually high power and speed. The vessel's performance will be closely watched because if, with its speed, *Beljay* also has the required sturdiness to offset any advantages that slower, more conventional craft might have it could set a new fashion in gillnet boats, to be widely emulated.



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LINES and LEADERS

Shallow-Water Sounder Spots Fish and Bottom Effectively

A fully transistorized depth sounder that can be operated from a fishing boat's 12-volt system or a separate battery pack, has been introduced by the Marine Department of the Bendix Corp., and is designed primarily for service where a guaranteed range of up to 100-feet is all that's necessary. Designated the DI-6, the flashing light type indicator is available with either thru-hull or transom type transducer fittings. Use of the latter, with the battery pack makes it a complete portable unit.

The exclusive Bendix-Brite-Lite indicator makes the reading of bottom soundings, or the locating of schools of fish, possible even in full sunlight, and the design of the transistorized circuitry eliminates stray and random flashes. Although rated as a 100-foot depth unit, the Bendix DI-6 has the power necessary to give accurate depth soundings far in excess of the 100-feet. By the use of transistors throughout the unit, the current drain is approximately 1/10 of an ampere, which is so little that a battery pack will operate the unit for hundreds of hours.

Radiomarine Advances Dmochowski

Appointment of T. L. Dmochowski as manager of the Radio Corporation of America's Radiomarine Equipment Department is announced by J. J. Graham, division vice president and general manager, RCA Communications and Controls Division.

Mr. Dmochowski will be responsible for the engineering and marketing of RCA communications and navigation equipment for vessels of all types, from pleasure craft to ocean-going ships.

Mr. Dmochowski was manager of Management Engineering on Mr. Graham's staff. Previously he had been Administrator of Value Analysis on the corporate staff, with headquarters in Camden.

Foreign-Based Tuna Seiners

Extensive refitting of the purse seiners **Defense** for operation off the Central America coast and the **Joe Marie** for operation off the West African coast, included the installation of model N529 Northern Radiotelephones, to insure the long range communications required in this type of fishing service. Both vessels will fish for Star-Kist.

According to Jerry Fries of Benrad, Inc., San Pedro, who supplied the Northern Radiotelephone equipment to the two ships, the sets are rated at 180 watts input and cover the frequency range of 1600 to 18,000 KC. A total of 11 crystal controlled channels are provided for transmitting and receiving on any of the low and high-seas frequencies, in addition to a tunable receiver that also covers the entire frequency range of the transmittor and the broadcast news and entertainment band.

With the Northern radiotelephones, the ships will be able to maintain radio contact with their base operations while working fishing grounds several thousands of miles distant.

Peterson Names Ed Cryer As "Cat" Engine Sales Mgr.

Appointment of Ed Cryer as Engine Sales Manager of Peterson Tractor Co. has been announced by Howard Peterson, president of the Caterpillar dealership at San Leandro, Cal.

Ed has been with Peterson's 10 years and formerly was a Service Representative with Caterpillar Tractor Co. | Most recently, he has been in charge of sales for Peterson Marine, a division of Peterson Tractor Co. that handles Cat Marine Engines throughout Northern California.

With his new duties, Cryer will also direct sales operations of the complete Cat Diesel Engine line.

Loker Heads Southern California Cancer Center

Donald P. Loker, vice-president of Star-Kist Foods, Terminal Island, Calif., is the current president of Southern California Cancer Center. Announcing the naming of 13 new directors of the Center, Mr. Loker recently pointed out that the Center is considered the most adequately equipped cancer facility in the West.

Victor Klose Heads Alaska Trollers Assn.

Victor Klose of Ketchikan is the new president of the Alaska Trollers Association, succeeding J. B. Cotant.

Headquarters of the Association are at 2523 First Ave., Ketchikan.

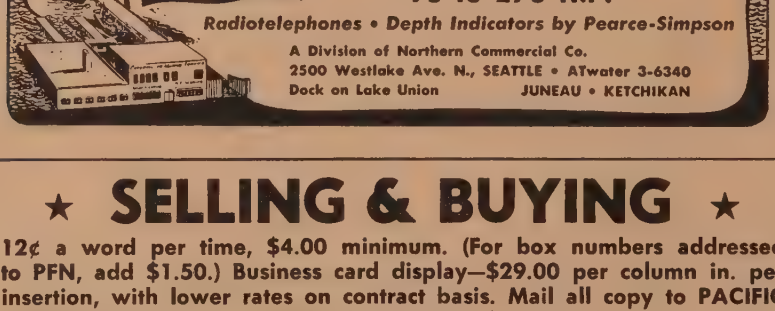
Quarter-Pound Fillers Become a Real Factor

With 16 new Rooney quarter-pound filling machines due for delivery this spring, in addition to the several hundred operated last season, machine filling of these smallest-of-all salmon cans will become a factor of considerable consequence in salmon canning.

Where all of the machines will go is not yet certain, but it appears sure the majority will be operated on Puget Sound.

In addition, it is understood at least three will go to Kenai on Cook Inlet and that two are scheduled for False Pass.

Bristol Bay will get into the quarter-pound picture with one of the 1960 Rooneys at the Mormac cannery at Naknek.



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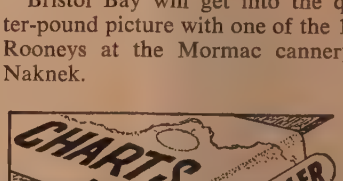

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Ideas, Devices, Methods Fishermen Find Profitable

Two versions of "Swimmerspoon", the commercial "Flatfish".

Ocean-Going "Flatfish" Is Counted a Killer

"Flatfish" is the name of a familiar sport fishing lure which has done a lot of fish to death and over the years since its introduction made fishermen out of a flock of duffers.

Now Charles P. Helin, who created Flatfish, has come-up with a sea-goin' lure specially for salmon. He calls it a "Swimmerspoon."

Beside being built for stout, to take the strike of a deep-swimming King, the "Swimmerspoon," which is 6" long, swims with its nose *up;* whereas its prototype "Flatfish" fishes nose down.

Commercial trollers, who have not been above taking tips from sport fishermen before, will be trying the new lure this season.

Beach Anchors Provide Hold-fasts for Set Nets

How to hold a set net in the violent tides which sweep Bristol Bay is one of the problems of fishing in that Alaskan area, a problem which had always beset the men who operate these stationary nets in spite of the savage tides.

Beach augers are one answer to the problem, and specialized equipment of this sort is provided for the fishermen by Jack Pruzan Co., Seattle. It consists of a strong steel rod with an oval eye at one end and with the other end sharpened and twisted into a spiral screw.

CWC Packing Co. and American Packing Co., both operating in the Naknek area, are among the firms sending the new gear north this year to serve their setnetters.

Slippery Polyprop Yields Advantages in Trawling

Matching results from experimental fishing with two trawls, identical in construction, save that one was made of polyphopylene and the other of manila—lines as well as web—showed the U. S. BCF specialist aboard the gear research trawler *Delaware* this spring that the synthetic gear had better over-the-bottom performance, made a somewhat better catch, was easier to handle, and showed greater dimensional stability in mesh sizes.

On all counts the polyprop gear was rated superior. The synthetic is said to be lighter and swifter to handle than the natural fiber, and does not lose strength as markedly when wet.

Collapsible Crab Pot Patented by Astoria

Chris I. Leding, Astoria fisherman and longshoreman, has received a patent on a collapsible crab pot. It is a rectangular type, after the Kodiak style, and folds quite flat through the operation of hinged vertical units.

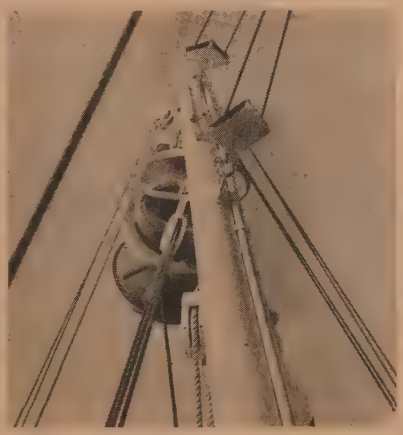
When erected for fishing the pot is held in full shape by a diagonal support which itself is hinged but can be locked as a stiff unit.

To Cushion the Power Block's Banging

• A number of big seiners — and some Alaska limiters also — are securing an old tire to the side of their Puretic power block next to the boom to cushion the shock when the block bangs about in a seaway.

Here's a "Pacific Fisherman" photo of a big tuna seiner's boom point, showing the tire on the block and also the steel pipe bumper in the shape of a flattened oval, fixed to the boom opposite the mid-point of the block further to absorb the shock.

Thus both block and boom are protected from damage which can be quite severe in heavy weather.



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"Save 3 days running time . . . carry 4,000 extra pounds of fish per trip . . . made the market twice last year where we would have had to wait another day..."

Those are just a few of the highlights of Skipper "Arnie" Madsen's report on the benefits he's getting since he repowered his 65-ft. ILENE with a "6-110" GM Diesel.

He also reports his repowered halibut fisherman takes in about $4,000 more per season, carried an extra 20,000 pounds of fish last year, lost a lot less catch-weight because of the faster speed it has now.

And Chief Engineer John Lorentzen says, "On our first 1960 trip, we landed 64,000 pounds of halibut at Seattle on a Saturday after our catch was posted Friday afternoon. With the old engine, we would have been at least two days behind and in bad weather on Sunday."

Today, the ILENE cruises up to 8.66 knots under load—23% faster than before. Her 220 S. H. P. GM Diesel takes up less space than her old 90 H. P. engine —swings a larger 54″ x 43″ wheel through a 4.5 to 1 reduction gear. And she's got the positive starting and cold-weather protection of a GM Hydrostarter.

Now the ILENE is a bigger money-maker than ever. Let us show you how you can boost your profits and productivity with a GM Diesel. Get the facts now. See your GM Diesel Distributor—he's part of a coast-to-coast network of "engine people" you'll find in the Yellow Pages under "Engines, Diesel"—or write direct for more information.

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Pyrophosphates Show Promise For Struvite Prevention

Prevention of struvite crystal formation in canned seafoods through the use of tetrasodium pyrophosphate is being tested by the laboratories of the National Canners Association. There appears to be at least a good possibility that this officially acceptable food ingredient may be the answer to the problem of small, harmless crystals which sometimes cause concern to consumers because the crystals might superficially resemble glass.

These crystals have been analyzed and are invariably identified as a harmless chemical substance, magnesium ammonium phosphate, which is also referred to as struvite. The chemicals which make up these crystals are necessary in one form or another for normal health and are always present in the bodies of fishes, animals and man, but it is only under certain conditions that these substances unite to form crystals.

The crystals have about the same hardness as crystals of ordinary table salt and will cause no harm if swallowed as they will dissolve in the digestive juices of the stomach.

Experimental work in the research laboratory of the Columbia River Packers Association, Astoria, Oregon, has indicated that tetrasodium pyrophosphate, when added to seafoods prior to canning, is effective in preventing the formation of these struvite crystals.

This compound, tetrasodium pyrophosphate, has been listed by the United States Food and Drug Administration as safe for use in food.

Pacific Fishery Technologists Elect Dr. Tarr President

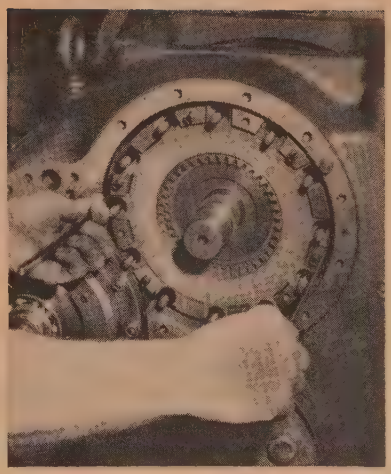
The twelfth annual meeting of the Pacific Fisheries Technologists held in Bellingham, Wash., March 19 to March 22, elected Dr. H. L. A. Tarr of the Fisheries Research Board of Canada president.

This meeting is held annually to provide an opportunity for those working in the technological areas of the fishing industry to discuss their work on an informal basis and to hear reports of the work of laboratories engaged in activities of interest to the industry.

93 Individuals from Alaska, British Columbia, Washington, Oregon and California, representing Federal, State and Provincial government and private industry attended this meeting.

The following officers were elected

TWIN DISC MARINE GEARS keep maintenance *in the boat!*



It's not by chance that Twin Disc Hydraulic Marine Gears are so easy to service. They're designed that way by Twin Disc engineers.

Take clutches, for example. These can be removed without detaching the gear from the engine, making replacement of worn plates a simple matter. Wear is kept to a minimum too, since almost all the energy of the shift is absorbed in the oil that is pumped continuously through the clutch plates.

The hydraulic pump is serviced just as easily — it plugs into the clutch shaft and is held in place by four cap screws.

Add serviceability to the long list of Twin Disc performance features and you can understand why Twin Disc outsells all other marine gears in the 40 to 500 horsepower class.

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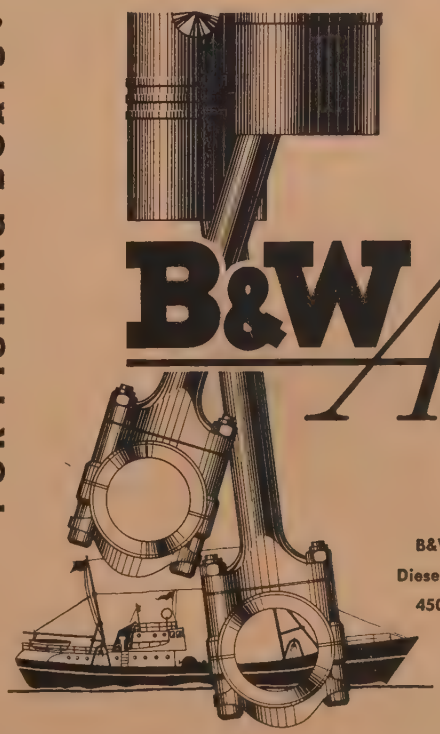

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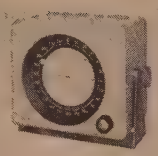

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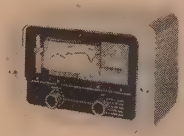

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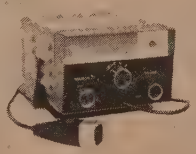

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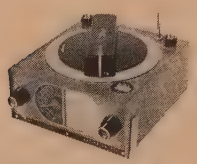

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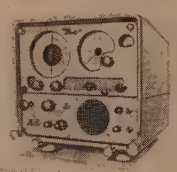
3 models including transistorized portable.



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for 1961-1962 at the annual business meeting: President, Dr. H. L. A. Tarr, Fisheries Research Board of Canada, Vancouver; Secretary-Treasurer, John Harrison, Fisheries Research Board of Canada, Vancouver.

Regional Representatives—*Alaska*: Charles Jensen, Alaska Department of Fish and Game, Juneau; *British Columbia*: Wilf Tutton, American Can Company, Vancouver, B. C.; *California*: Howard Dunn, Van Camp Seafood Co., Long Beach; *Hawaii*: Scott McLeod, Hawaiian Tuna Packers, Honolulu; *Oregon*: Russ Sinnhuber, Oregon State University, Corvallis; *Washington*: Don Crosgrove, National Canners Association, Seattle.

Pacific Fishery Statistics Collectors Compare Method

The men and women who gather, compile and prepare fishery statistics for publication held their first Pacific-Coastwide meeting late in February at the California Department of Fish and Game office on Terminal Island. Ten visiting fishery statisticians from Alaska, British Columbia, Washington and Oregon were welcomed by a delegation of ten from the host California department.

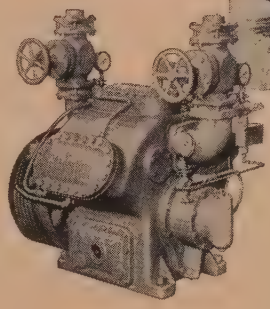
The statisticians spent three days discussing ways of improving their methods, speeding up preparation of figures for publication, and co-ordinating their work when co-ordination is called for. E. C. Greenhood, California Fish & Game statistician, was in charge of arrangements and acted as chairman of the meetings.

Although the program consisted almost entirely of down-to-cases workshop meetings, there was time for a tour of the California commission's facilities, a cocktail party at the home of Mrs. Annine Phillips of the California commission, and a banquet in Long Beach.

Present from out-of-California were Phil Chitwood, Alaska Department of Fish & Game; Blacke Campbell and Laurie Young, Canada Department of Fisheries; Art Palmen and Dale Ward, Washington Department of Fisheries; Homer Campbell, Oregon Game Commission; Earl Pulford and Harrison Smith, Oregon Fish Commission; Harry Davis and V. S. Samson, US Bureau of Commercial Fisheries. The California delegation consisted of Mr. Greenhood, Phil M. Roedel, marine resources manager, Fish and Game Department; Walter Shannon, department director; Norman Abransom, Dorothy Bailey, Ida Brown, Mrs. Phillips, James Ryan, Leona Sharp, Esther Smith and Simi Taylor.

Alaska Salmon held to perfection aboard Theo E using Vilter refrigerated sea water

The Theo E, one of a number of vessels owned and operated by Norman Holm, is equipped with a sea water chilling system using a Vilter VMC compressor and condenser. Hold capacity of the Theo E is 95,000 pounds.



A view of a typical Vilter VMC ammonia compressor. Available in 2, 4, 6, 8, 12 and 16-cylinder sizes. Vilter VMC compressors supply maximum capacity in a minimum of space.

An increasingly popular method of removing heat from fish is the use of chilled sea water in place of regular icing. The sea water prevents air from surrounding the fish and affords little opportunity for oxidation of the fish surfaces . . . flavor and freshness are preserved. This chilling system also results in more production per boat and reduced labor costs.

Among the sea water chilling installations aboard ship in the Puget Sound and Alaskan area is the *Theo E*, a vessel owned and operated by Norman Holm of Seattle. On the *Theo E*, sea water passes through a chiller where it is cooled and then circulated in the brine tanks to protect the catch. The chiller is located in the main tank and is regulated to provide a constant 29-degree temperature. It can bring a full cargo down to this temperature within 14 hours.

Providing the refrigerating effect for the chiller is a diesel driven Vilter 2-cylinder VMC ammonia compressor and a Vilter shell and tube condenser. The units are exceptionally compact and installation time and costs are minimized.

The same sea water chilling equipment is equally effective in holding fish at the proper temperature at shore plants, prior to processing.

Why don't you write Vilter direct or see your nearest Vilter distributor for helpful advice on your vessel or cannery refrigeration needs.

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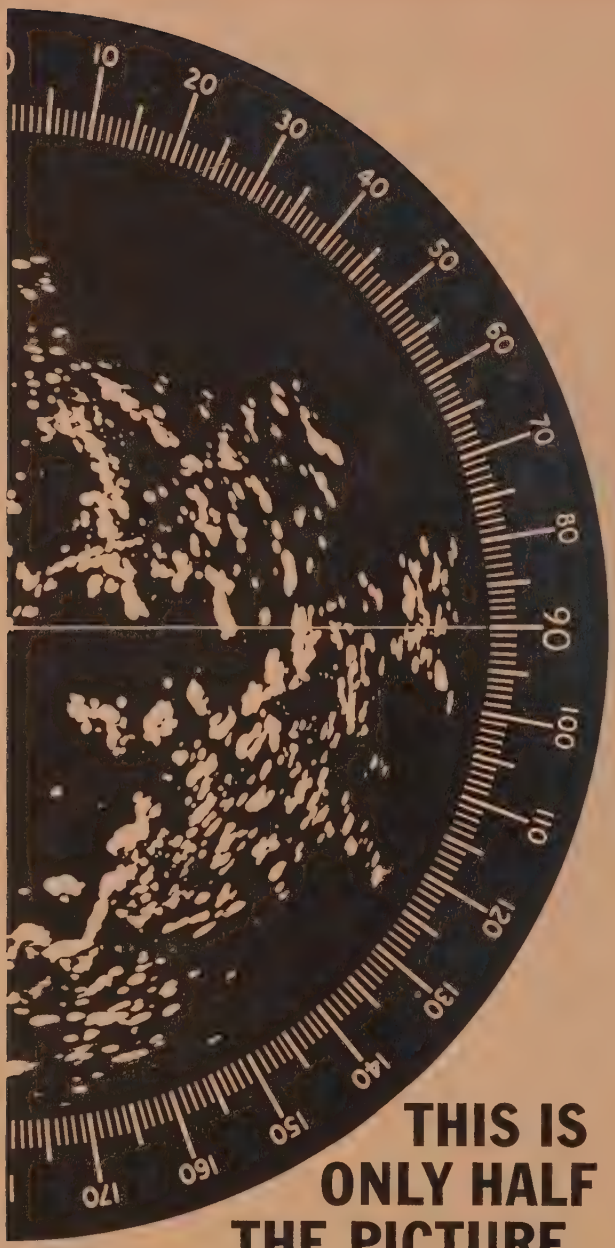
Write for your copy of Bulletin 017 to The Vilter Manufacturing Company, Dept. PF-605 2217 South First Street Milwaukee 7, Wisconsin



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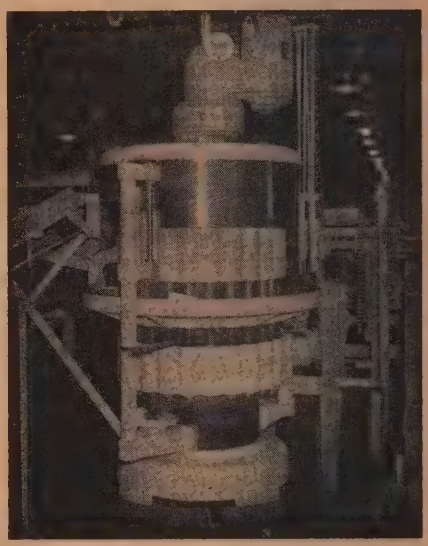

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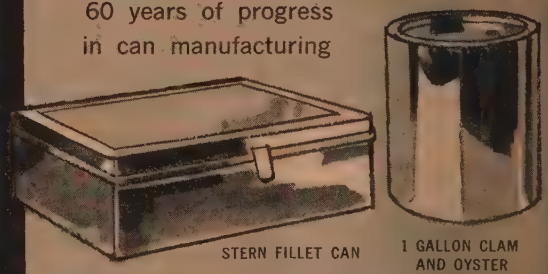

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FOOD FISH MARKETING
Section of PACIFIC FISHERMAN —
News and Views of National Trade in Fish and Shellfish
April 1961

"Better-Than-Average" Rating Accorded 1960 Canned Salmon

● Critical examination of 603 cans of salmon of all species and from all packing districts, inspected at the 23rd annual Canned Salmon Cutting sponsored by the Northwest Branch of the National Canners Association, gave the 1960 pack a Better-Than-Average quality rating.

It's extremely difficult to compare objectively the quality of two annual packs of salmon examined a year apart, and with different teams of judges in successive years. However, careful, honest appraisal, and thoughtful analysis of the faults found and the percentages of their occurrence form a basis for comparison.

Chairman of the species committees were able to report their teams found the pack better on all species save Cohoes.

● On its own characteristics, apart from the way they compared with the previous year or any past seasons, the 1960 pack measured-up satisfactorily in quality. This was significant in view of the generally small size of the fish, particularly in Bristol Bay Reds and Southeast Alaska Pinks. Despite the quality problems generally associated with packing small fish, there seemed to be no complaint directly chargeable to size. Oil and color generally were rated good.

Faults fell almost altogether on various points of *workmanship* rather than the *natural character* of the fish themselves, their *handling*, or the *cans* in which they were packed.

Condensing the reports of the five species chairmen, this is what the judges found:

● *Chums*, reported on by E. H. Algyer of Washington Fish & Oyster Co., chairman:

The grade generally was rated closely comparable with the 1959 pack, but with color *much* better. Filling tended to pull the species rating down, with ragged end cuts a stand-out fault. Cleaning was good, but salting was erratic, with 10% of the cans criticized on this point. Pugh marks and mixed species were of no importance.

● *Pink* chairman was Eilert Holbeck of Petersburg Processors, Inc., who reported:

The species rating was definitely up over 1959. General appearance of the cans was good, and filling was found to be improved by 11% over the year before. Cleaning also was rated better, but salting was poor, and there was more water-marking. In spite of this, oil was good. Top rat-

JUDGING IS SERIOUS BUSINESS at the canned salmon cutting. By rows, from the left: **TOP**—Dr. Ira Somers, National Canners Association, and Fred Jermann, Columbia River Packers Association; Carl Aspelund and James A. Ekern, CWC Packing Co. **MIDDLE**—Frank McConaghy, Alaska Packers Association, and Don Mullis, Kadiak Fisheries Co.; Norman Rockness and Herman Bisom, Alaska Packers Association. **BOTTOM** — Robert Morgan, Western Fisheries Co., and C. B. Williams, Queen Fisheries, Inc., Red salmon chairmen; Mr. Mullis; John A. Gillis, Pacific American Fisheries; and Merlin Fischer, Safeway Stores.

ing of "Good" was won by 17% of the cans, which is unusual at the hands of the judges, who definitely are inclined to be hard to please. Out of 122 cans examined in this group three were disqualified for being of species other than Pink.

● *Cohoes* were reported on by Robert Dignon, Northern Products Corporation, whose judging teams found:

Filling and cleaning were both down from 1959 and below standard. Only 22½% of the cans were accepted as being well-filled. Color was average. Only about two-thirds as many cans were rated "Good" as in 1959, while the "Better-Than-Average" and "Average" categories both showed slight declines.

● *Reds and Sockeyes* constituted the largest species group and K. Alan Dehn, chairman, reported on quarters, halves and talls separately.

Quarters, with 64 cans represented, showed good oil. Filling was the main fault. Only one quarter-pound can was rated "Poorer-Than-Average."

Halves were generally found acceptable, particularly on oil and color. Filling was only fair.

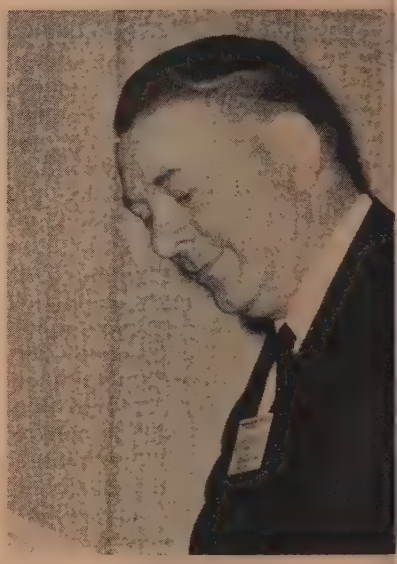
Talls seemed to reflect something of the problems of packing the tremendous Bristol Bay run of 1960, workmanship being faulted by the judges on 21% of the cans. Again, salting came in for criticism and just over 20% of the samples were rated below average.

● *Chinooks* were very well regarded by the judging teams whose work was reported on by Robert Morgan, Western Fisheries Co., chairman.

This species was rated decidedly better than in 1959, especially in fish quality as manifest in color and oil. The cans rated below average were a third less than last year, and Mr. Morgan summed up his report saying "Chinooks generally were much better this year.'

● Quarter-pound cans came in for special interest among the several hundred interested cannerymen because of the fact that machine filling of quarters was initiated commercially in 1960 for the first time.

"Can you pick out the machine pack?" was a common question. Examination of some of the code sheets created the impression that even the expert canneryman would often fail to do so. One superintendent, who probably had as many machine-filled quarters in the cutting as any other, gave *Pacific Fisherman* a peek at the scoring accorded his cans. Not one was below average, and more were rated "Good" or "Better-Than-Average" than took the "Average" grade.



Robert E. Graham, vice president and sales manager, Pacific American Fisheries, Inc., and Deming & Gould Company, chairman of the Canned Salmon Institute.

Salmon on the Table—One of the four long tables on which more than 600 cans of salmon were critically examined by judges at the 23rd annual Canned Salmon Cutting. Recognizable at the left: Robert E. Dignon, upper, and Eugene C. Scheerer.

Salmon and Halibut Teach An Old, Old Lesson About Price's Effect on Volume

• Principal Pacific frozen fish markets turned in some interesting spring performances, and once more demonstrated in lights bright enough for all to read, that price plays a powerful part in the movement of fish—up or down.

For example: Halibut—

In 1960 the North Pacific halibut fleets caught nearly 72 million pounds of halibut — an all-time record. Almost 50 million pounds of it was frozen. *The buying price was low*—averaging only 18.88¢ per lb. for all grades at Seattle. The dealers, badly burned in 1958, and some of them singed again in 1959, just wouldn't be tempted out of a conservative bidding determination.

Then there's Salmon—

The year 1960 saw the poorest salmon trolling—taking the coast as a whole—that the Pacific has ever seen. Prices were bid up and up and finally skirted around just below the fabulous level of $1 per lb., drawn, *to the fisherman.* That was for large red Kings, of course. Silvers, troll fish dressed, reached 60¢.

There were supposed to be no seine Silvers, and the price reached astonishing levels.

Then the Chum run was a "failure." To hear the stories you'd think the fishermen ate all they caught, leaving absolutely nothing to sell.

• So there you have it: lots of halibut, priced cheap; and very little salmon, priced high. That was last fall.

Now that it's spring and Lent is over, what's the story?

Halibut is all gone, and everyone is ga-ga waiting for the season to start. Even Homer Stevens couldn't get a strike started.

And salmon? Oh, plenty of it — still priced fairly high of course, but far below the point where there's any profit in it.

In short, salmon was priced so high it didn't sell.

And, besides, it seems there was quite a little more fish in the freezers than many folks thought. A lot of Falls and Silvers seemed to have gotten into storage without anyone noticing it. For a "flat failure," the Chum fishing, particularly in British Columbia, turned out quite a little jag of "Silver Brights."

• But this exceptional and unsuspected increment of frozen salmon over and above the generally excepted scarcity wasn't cheap fish. It had been built-up by paying premium prices for every fish you could get; by bidding the price up to the point where the canner couldn't compete—not even at $24 per case of talls.

In short, salmon was priced to the point where the buyer revolted; and, worse yet, it appeared that last fall freezers had packed more fish than they thought, or admitted.

• So, the price of salmon was too high, *a lot too high for the amount packed.*

• Halibut, on the other hand, bought in record volume at low prices, sold out readily; but *you can bet the fishermen are expecting bids this year.*

P.A.F. Pays $10 Dividend

Pacific American Fisheries, Inc., large salmon canning firm and the leading American King crab canner, will pay stockholders a $10 dividend in April. Its last dividend was paid in 1957.

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Richer Redder

"Packed with the Wiggle in its tail"
NEW ENGLAND FISH CO.
Seattle, Wash.
Since 1868
Producers ★ Packers ★ Distributors
Canned ★ Fresh ★ Frozen ★ Seafoods

So. Calif. Domestic Tuna Deliveries

Cumulative 1961 Totals through March 18, in tons as reported by U.S. Market News Service

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito, etc.	Total
Clippers and Albacore Fleet	...	...	640	3,849	...	4,489
Purse Seiners	...	...	382	20,067	526	28,449
Total 1961 through Mar. 18	...	...	1,022	31,916	526	33,464
Total 1960	...	110	6,003	21,683	17	27,813
Total 1959	...	104	9,910	15,695	112	25,821

Southern California Receipts

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito, etc.	Total
San Pedro	3,834	...	580	30,768	526	35,708
San Diego	241	...	637	4,824	...	5,702
Total 1961 through Mar. 18	4,075	...	1,217	35 592	526	41,410
Total 1960	6,776	122	8,758	24,512	17	40,185
Total 1959	4,416	104	11,983	27,177	112	43,792

"Gillnetters' Best" Brands Now P. E. Harris' Exclusive

P. E. Harris Co., Inc., in March announced through John Lauc, sales manager, completion of arrangements by which it becomes the exclusive sales agent for the famous "Gillnetters' Best" brands of the Union Fishermen's Cooperative Packing Co., Astoria, Ore.

KELLEY-CLARKE COMPANY ESTAB. 1895

• SELLING AGENTS •

CANNED SALMON

NORTHWEST TUNA

ALASKA KING CRABMEAT

DUNGENESS CRABMEAT

PACIFIC SHRIMP

KELLEY-CLARKE COMPANY
2460 6th Avenue South
SEATTLE 4, WASHINGTON
Phone: MAin 2-2582

Los Angeles Market

Current canned fish prices from Los Angeles and San Pedro brokers and cannery sales departments, as reported at presstime by the USBCF Market News Service.

Product	$/Case
TUNA (advertised)	
White, fcy., #½	15.00
White, chunk, #½	13.25
White, chunk, #¾ (2 doz.)	14.25
Light fcy., #½	14.25
Light, chunk, #½	12.50
Light, chk., #¾ (2 doz.)	8.70
Grated, #½	7.50- 7.75
TUNA (Buyers Labels)	
White, fcy., #½	11.50-12.00
White, chunk, #½	10.00-10.50
Light, fcy., #½	10.50-11.25
Light, chunk, #½	9.00-10.00
Grated #½	7.00- 7.50
TUNA (Imported, Japanese, in brine)	
White, solid, #½	11.50-11.80
White, solid, #1 (2 doz.)	10.70-11.00
White, solid, #4 (½ doz.)	12.50-12.75
Light, solid, #½	8.90- 9.25
Light, solid, #1 (2 doz.)	8.90- 9.10
Light, solid #4 (½ doz.)	9.50-10.00
SARDINES	
Tomato, oval, #1	6.00- 6.25
Natural, tall, #1 (2 doz.)	4.50
ANCHOVIES	
Tomato, 5 oz., 100s	6.00
Tomato, oval, #1	7.00- 7.50
MACKEREL	
Pacific, #1, tall	6.00- 6.25
Jack, #1, tall	5.75- 6.00

NOTE—All in cases of 48 cans unless otherwise specified.

Seattle Market

Market prices currently quoted at presstin by Pacific Northwest brokers and canne sales department, cases of 48 tins, unle otherwise specified, good quality, as reporte by the U. S. Bureau of Commercial Fisherie Market News Service.

Items and Packages Puget Sound	Per	Case
Sockeye, halves	$	-25
Sockeye, quarters		-15
Alaska		
Red, talls	35	-37
Red, halves	23	-25
Pink, talls		-28
Pink, halves	15	-16
Med. Red, talls	31	-32
Med. Red, halves	19	-20
Med. Red, quarters	13	-14.0
Chum, summer, tall		-25
Chum, summer, halves	13	-14
Chum, fall, 4-lbs. (12		-25
Chinook, talls		-32
Columbia River		
Blueback, halves		27
Blueback, quarters		-16.5
Chinook, fancy, halves	26	-27
Chinook, fancy, quarters	16	-16.5
Chinook, choice, halves		-19.5
Chinook, choice, quarters		-13.0
Silver, halves		-19.0
Silver, quarters		-13.2
Tuna, Northwest Pack—		
Albacore, fcy., 7 oz.	11.00-12.5	
Yellowfin, s/pack, 7 oz.		-10.5
Yellowfin, chunk, 6½ oz.	9.50- 9.8	
Tuna, Columbia River Pack		
Albacore, fcy, 7 oz.	14.85-15.2	
Albacore, fcy., 3½ oz.	8.85- 9.1	
Albacore, chunk, 6½ oz.	10.50-13.2	
Albacore, chunk, 3 oz.	6.50- 8	
Lightmeat, fcy., 7 oz.	14.25	
Lightmeat, fcy., 3½ oz.	8.55	
Lightmeat, chunk, 6½ oz.	11.00	
Lightmeat, chunk, 3½ oz.	7.50	
Canned Shrimp—		
Northwest: 4½ oz. wet pack		- 7.2
Alaska: Tiny (over 17 per oz.)		- 7.2
Small (10-17 per oz.)		- 8
Medium (6-9 per oz.)		-10
Canned Crab		
Dungeness, 24, 6½ oz.	13	
Dungeness, 24, 3½ oz.		- 8.5
King, fcy., 7½ oz.		-32
King, std., 24, 6½ oz.		-15
King, std., 24, 7½ oz.		-16

California Imports of Frozen Tuna

Cumulative data in tons for 1961 through March 18, and for other years to the nearest comparable date. Data from U. S. Market News Service

	Albacore	Skipjack	Yellowfin	Unclassified	Tota
San Francisco	1,176	..	975	35	2,18
San Pedro	3,834	177	3,624	...	7,6
San Diego	241	18	52	...	3
Total to March 18	5,251	195	4,651	35	10,1
1960	6,977	1,331	5,984	55	14,34
1959	4,517	2,224	13,422	...	20,16

Hazards at Retail Level To Frozen Packaged Fish Revealed at 6th Cutting

North Pacific frozen fish packers w once more, and with increasing arity, the hazards to which their ackaged products are exposed in assing from the packing plant and its lated cold storage through the chanels of retail distribution and into the onsumers' kitchens.

The occasion was the sixth annual utting of packaged frozen products, eld in Seattle March 15 under the onsorship of the Pacific Northwest sheries Association and the Naonal Fisheries Institute.

This year for the first time the sames were marked as to whether they ere taken from wholesale or retail urces. The difference generally was vious—and particularly so in one mple which the operators could entify as having been in retail chanels for approximately five years.

With a few exceptions, the cutting-d-judging indicated improvement in oduct quality, regardless of the level om which the samples came.

With W. B. Hall of Booth Fisheries orporation in charge, the cutting was tended by Harris Magnusson, chief technology for the NFI, who sounda keynote which seemed to sum-up e results of the sixth cutting: "Exrience is the basis for improvement. Here were some of the results as ported by judging chairmen:

Murray Andrews, reporting on King ab: "The samples from wholesale ere much the best; in fact, quite od. Those of retail origin showed the depreciating effect of improper storage treatment."

Pat Kelly of Safeway Stores, reporting on sole fillets: "Our examination showed the samples 5-to-1 Grade A over Grade B. De-grade was due to excessive storage, small pieces and excessive range of weight between pieces."

Steve Chase, Everett Fish Co., Pacific Ocean perch: "De-grade was due largely to wide size range between pieces. Quality was good, considering the fact that this is the off-season and all samples had been packed for some time."

Palmer Olson, New England Fish Co., reporting for halibut steaks: "They were improved over previous years. All the wholesale samples were Grade A. Workmanship was the principal factor in de-grade of samples, but they showed how important are time and temperature of storage on quality."

Carlos Moore, USBCF, reporting on salmon steaks: "The selection of sizes was not good, and faulty workmanship was also responsible for some de-grades. We had one sample known to have been packed about five years before. The package itself had stood-up well, but the product had not."

Harris Magnuson, director of the NFI technology division, ascribed much of the retail level impairment of frozen packaged fish to the "backroom treatment" rather than to the storage conditions in the refrigerated display case itself. "We often find the display case with Zero temperature, but the backroom box from which the case is filled little below freezing; and it is not unusual to find thawed packages in retail stores—found one in Seattle, by the way."

W. B. Hall, chairman of the frozen fish cutting, reported that in a number of cases unsatisfactory condition of the samples appeared to be chargeable to the fishermen and to a lack of care aboard the boat and before the fish was landed.

SALMON SURPRISE seems to have startled Russ Boshell of San Juan Fishing & Packing Co. as he inspects these steaks and grabs at his beating heart; but Bud Moore of the USBCF takes it calmly enough.

VITA FOOD

TRADE MARK

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FISHER RESEARCH LAB., INC., Palo Alto, California

Royce's Point No. 1—

Get Right Number of Spawners On Grounds at the Right Time

● Dr. W. F. Royce, director of the Fisheries Research Institute, University of Washington, speaking before 400 salmon canners at Seattle March 14 on the general subject of "Natural Propagation of Salmon" made two plain points, of which the first follows, in his own words.

● Salmon leads the most precarious existence of any of our great species of fish. They lead a remarkable life —from the egg in the gravel of a freshwater stream, to the fattening juvenile a thousand miles at sea, and to the adult which must return to its birthplace. During their last journey they are especially vulnerable. Their spawning can be controlled as we wish —even to preventing it and exterminating them.

For many years we have tried to improve on nature through artificial propagation by stripping the eggs from the salmon, hatching the eggs, and rearing the young. Currently this is being done with Silvers and Chinooks in about 45 hatcheries in Washington and Oregon, but these 45 hatcheries, which cost nearly 3 million dollars a year to operate, are producing annually only about 1 million returning adult salmon. This is roughly 10% of the total United States catch of salmon.

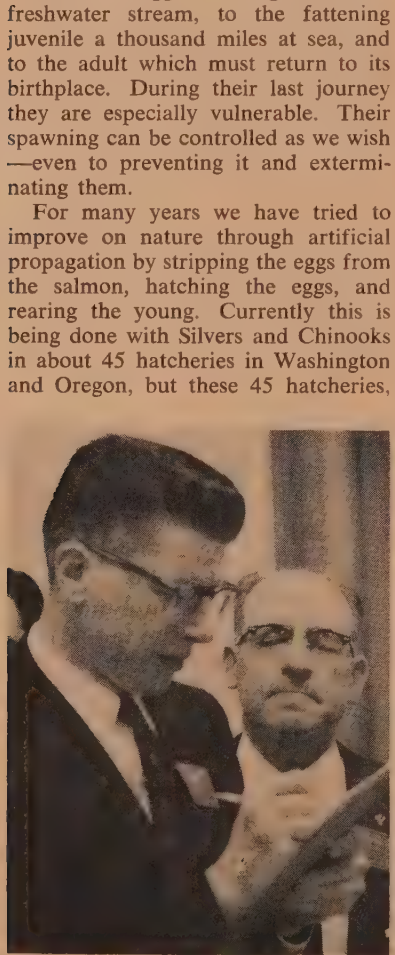
Hatching and rearing salmon is very difficult, and we don't know how to do it economically with reasonable assurance of success. The problems range from the difficulty of getting spawners into the hatchery at the right stage of development, and to the problem of finding a race of salmon adapted to the hatchery routine and the problem of releasing healthy fish. These problems must be solved if we are to compensate for the spawning grounds lost through other uses of water, and much work is being done. But meanwhile we have neglected the fact that 98% of our salmon result from natural spawning, and grow up as wild fish. The streams where these salmon are born have, within the memories of all of us, produced more than twice as many salmon as they are now producing.

Clearly, we can do a great deal more to foster their natural reproduction. Each year the International Pacific Salmon Fisheries Commission in its management of the Sockeye salmon of the Fraser River shows that natural reproduction can be highly successful. They have found that it depends on getting the right number of salmon to the spawning grounds in good condition at the right time. Surely these principles apply to other salmon runs.

In our undisturbed streams the salmon runs have evolved and fitted themselves into the temperature and water conditions. All of the large runs just naturally get to the spawning grounds in good condition at the right time with average stream conditions. Therefore, our major problem is to get the right number to the spawning grounds, and we do this by regulating the fishery.

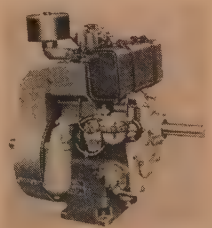
Question and Answer . . . Lilly-to-Royce-to-Lilly

Two Bills in close conversation at the Canned Salmon Cutting. Subject: Salmon.



Judicial Disagreement? Leif Eriksen, Northern Products Corporation, notes a point at the canned salmon cutting but Judge Milton Smith of Farwest Fisheries seems slightly skeptical.

PETTER DIESEL ENGINES AND GENERATING SETS



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Maximum Sustainable Yield is Whole Purpose of Regulation

• Second point made by Dr. W. F. Royce, Fisheries Research Director, to the salmon industry March 14 was that regulation of the salmon fisheries can have only one rational purpose—to provide the maximum harvest which can be sustained from year to year. He made the point in these words:

Regulation of a salmon fishery is ery complicated, and most of our egulations have been concerned with ther providing for orderly fishing r merely preserving the runs. We pro- de for orderly fishing by licensing shermen, by standardizing vessels, ets, and gear of all kinds, and by roviding for fishing only on certain ays. We have tried to preserve the ins by reducing the efficiency of the shery, and by closing areas where ie salmon are especially vulnerable to shing, notably around the mouths of reams themselves.

We must, however, do much more an merely preserve the runs. We ust obtain the maximum sustainable eld. In the case of salmon this means etting the right number of spawners the spawning ground so that the pawning and rearing facilities may e fully utilized and the rest of the ins caught. This is simple in prin- ple but difficult in practice. It be- omes possible only when we know nough about the runs to regulate em precisely. This is what we need know.

What are the units of the salmon populations that we can regulate separately. In Alaska there are perhaps 10,000 spawning groups of the several species of salmon and a major task is to recognize groups of runs, which mix in the fishery at the same time and which can be regulated as units.

We must have accurate and complete vital statistics on the catch and escapement of each of the species and age groups of the salmon.

We must have a forecast of the runs to be expected. If the runs are regular, this is no problem; but if they fluctuate as most of them do, we must anticipate the big runs in order to crop them and the small runs in order to protect them.

We must know how many salmon are actually needed on the spawning grounds — the optimum escapement. This is a very complex problem and we must know much more about the things that affect the survival of salmon in the gravel and in the freshwater rearing areas.

Finally, we must know the fishing intensity and how to control it in order to get the escapement we actually need.

In the regulation of all of our salmon fisheries we are deciding essentially whether to catch fish now or to let them spawn and catch their progeny. The regulation is productive only when it is based on the information that I have outlined. This information must be collected through research and it must be available to all parties, the fishermen, the packers, and the government managers. Regulation to obtain maximum sustainable yield is the only kind of regulation that is productive.

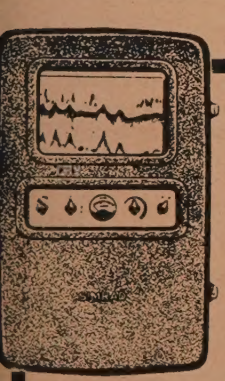
Other regulations are merely restrictive. Without the knowledge needed to regulate precisely for maximum sustainable yield, it is impossible to insure the effective natural propagation of salmon.

California Trollers Count On Productive Season

California salmon trollers were seeing favorable signs for a good run as they fitted-out their boats for fishing this spring.

Best indicator was the exceptional fishing found by sportsmen outside the Golden Gate and off toward the Farallones. The fish-for-fun men were doing exceptionally well; so well, in fact, that some of them were illegally selling their fish.

Appearance of prime, fresh troll-caught salmon in the markets more than a month in advance of the opening of the commercial season could mean only one thing. This sport fish had another effect beside encouraging the commercial trollers—it shot full of holes the market for frozen salmon, which suddenly became a seive.



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Available from 30 hp to 155 hp
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New gillnet float by B.F.Goodrich reinforced with tough grommets

If you've ever had your floats ripped apart by the weight of gillnets—here's news. This new surface float, developed by B.F.Goodrich, is reinforced at both ends with rigid plastic collars—called "grommets"—which take the wear, the weight, the rub. This tear-resistant reinforcement makes the float virtually indestructible.

The float itself is made of extra-tough unicellular plastic, is lustrous white for maximum visibility, and has all the other advantages of the famous BFG "Spongex" seine float. It's light, permanently buoyant, dries quickly, won't break or crumble. It will not absorb water, oil or gasoline, never gets waterlogged.

These new floats have a 16-ounce buoyancy — are 5⅛"-5⅝" long, 3⅛"-3½" in diameter, and have a 9/16"-11/16" inside grommet diameter.

Reduce your costs by asking for long-lasting B.F.Goodrich gillnet and seine floats. If your supplier doesn't have them in stock, ask him to write *The B.F.Goodrich Company, 145 Derby Place, Shelton, Connecticut.*

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More and more consumers are reaching for BUMBLE BEE Seafoods — with good reason. BUMBLE BEE consistently packs the finest quality seafood and backs it with aggressive advertising and promotion. Result? BUMBLE BEE is one of the country's fastest-growing seafood brands! To meet this demand, BUMBLE BEE has constantly expanded its production facilities in Oregon, Washington, Alaska and Hawaii. By buying more prime quality fish every year, BUMBLE BEE assures a growing market for the fisherman's catch.

BUILD A BETTER FUTURE WITH BUMBLE BEE

COLUMBIA RIVER PACKERS ASSN., INC., ASTORIA, ORE.

M. V. SOUTHISLE—seiner—75′ long 20′ beam, 9′ draft. Speed 10.6 knots. He WAUKESHA Wanderer (Model NKDBCSM turbocharged — non-intercooled Diesel— 6-cyl., 7 x 8¼-in., 1905 cu. in., 315 hp max. at 1215 rpm for 24-hr. duty— drive a 58 x 42 propeller through a 3:1 Twin Dis reduction gear. Installation by Northern Engine & Equipment Co., Vancouver.

FISHING in British Columbia waters, with a 9-man crew, the 75′ *Southisle* is a combination herring and salmon seiner. Her holds can carry 110 tons of herring. Built in New Westminster in 1942, her owners B. C. Packers Ltd., Vancouver recently repowered her with a Waukesha Wanderer Diesel— the power that pays profits. Economical to run, easy to maintain, and upkeep is low.

F/V VIKING—77′ long, 19.1′ beam, 8.3 draft. Speed, 10.5 knots. Built in Thomaston Maine, in 1931, for Captain Hans Haram her present owner. She is skippered by Lauritz Flem and is engaged in dragging for groundfish.

PACIFIC OR ATLANTIC

F/V VIKING was repowered in January 1960 with a Waukesha Defender engine (normally aspirated Diesel—6-cyl., 8½ x 8½-in., 2894 cu. in., 335 hp max. at 1215 rpm for 24-hr. duty). She uses a Snow Nabstedt Model 3774 reverse reduction gear, 3:1 ratio, and swings a 56 x 39 five blade propeller through a 5″ Monel shaft. Installation by Hathaway Machinery Co., Inc., Fairhaven, Mass. Her home port is New Bedford, and she ordinarily fishes in the George's Banks area twelve months a year.

WAUKESHA *Marine* DIESELS

UP TO 1100 HP
24-HOUR DUTY

for fishing vessels...tugs...
towboats and work craft of all types

510-R Send for detailed descriptive bulletins.

Engine	Type	Cyls.	Bore & Str.	Displ.	24-Hr. Max. Rating
RELIANCE	Normal	12	8½ x 8½	5788	725 hp @ 1215 rpm
	Turbo	12	8½ x 8½	5788	990 hp @ 1215 rpm
DEFENDER	Normal	6	8½ x 8½	2894	335 hp @ 1215 rpm
	Turbo	6	8½ x 8½	2894	510 hp @ 1215 rpm
WANDERER	Normal	6	7 x 8¼	1905	240 hp @ 1215 rpm
	Turbo	6	7 x 8¼	1905	315 hp @ 1215 rpm
RESOLUTE	Normal	6	6¼ x 6½	1197	195 hp @ 1600 rpm
	Turbo	6	6¼ x 6½	1197	290 hp @ 1600 rpm
VIGILANT	Normal	6	5¼ x 6	779	150 hp @ 1800 rpm
	Turbo	6	5¼ x 6	779	195 hp @ 1800 rpm
CUTWATER	Normal	6	4¼ x 5	426	100 hp @ 2000 rpm
	Turbo	6	4¼ x 5	426	120 hp @ 2000 rpm
NAVIGATOR	Normal	6	4 x 4	302	65 hp @ 2000 rpm
	Turbo	6	4 x 4	302	85 hp @ 2000 rpm

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